

MULTI VRF INDOOR UNIT SERVICE MANUAL

T1/R410A/60Hz
(GC201107 -I)

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PRODUCT

PRODUCT

1 MODELS LIST

1.1 Indoor Unit

Type	Model Name	Product Code	Cooling Capacity(kW)	Heating Capacity(kW)	Power supply	Type
Four-way Cassette Type	GMV-R28T/Na-D	CM500N0180	2.8	3.2	208-230V 1Ph~60Hz	
	GMV-R36T/Na-D	CM500N0190	3.6	4.0		
	GMV-R56T/Na-D	CM500N0200	5.6	6.3		
	GMV-R71T/Na-D	CM500N0210	7.1	8.0		
	GMV-R90T/Na-D	CM500N0220	9.0	10.0		
	GMV-R112T/Na-D	CM500N0230	11.2	12.5		
	GMV-R125T/Na-D	CM500N0240	12.5	13.5		
	GMV-R140T/Na-D	CM500N0320	14.0	14.5		
Air Duct Type	GMV-R22P/NaB-D	CM800N0760	2.2	2.5		
	GMV-R28P/NaB-D	CM800N0770	2.8	3.2		
	GMV-R36P/NaB-D	CM800N0780	3.6	4.0		
	GMV-R56P/NaB-D	CM800N0790	5.6	6.3		
	GMV-R71P/NaB-D	CM800N0800	7.1	8.0		
	GMV-R90P/NaB-D	CM800N0810	9.0	10.0		
	GMV-R112P/NaB-D	CM800N0820	11.2	12.5		
	GMV-R140P/NaB-D	CM800N0830	14.0	15.0		
Wall Mounted Type	GMV-R22G/NaG-D	CM100N0230	2.2	2.5		
	GMV-R28G/NaG-D	CM100N0250	2.8	3.2		
	GMV-R36G/NaG-D	CM100N0290	3.6	4.0		
	GMV-R45G/NaG-D	CM100N0310	4.5	5.0		
	GMV-R50G/NaG-D	CM100N0300	5.0	5.8		
	GMV-R56G/NaG-D	CM100N0360	5.6	6.3		
	GMV-R63G/NaG-D	CM100N0370	6.3	7.0		
	GMV-R71G/NaG-D	CM100N0350	7.1	8.0		
Floor Ceiling Type	GMV-R28Zd/NaB-D	CM600N0230	2.8	3.2		
	GMV-R36Zd/NaB-D	CM600N0240	3.6	4.0		
	GMV-R50Zd/NaB-D	CM600N0250	5.0	5.8		
	GMV-R71Zd/NaB-D	CM600N0260	7.1	8.0		
	GMV-R90Zd/NaB-D	CM600N0270	9.0	10.0		
	GMV-R112Zd/NaB-D	CM600N0280	11.2	12.5		
	GMV-R140Zd/NaB-D	CM600N0300	14.0	16.0		
						

Air Handler Type	GMV-R71A/Na-D	CM700N0010	7.1	8.0	208-230V 1Ph~60Hz	
	GMV-R100A/Na-D	CM700N0020	10.0	11.0		
	GMV-R140A/Na-D	CM700N0030	14.0	15.0		

NOTES:

- Design of this unit accords with the Standard GB/T 18837-2002.
- Noise was tested in semi-silenced room, so the actual noise value will be a little higher for change of ambient.
- Nominal capacities are based on the following condition.

2 NOMENCLATURE

$\frac{\text{GMV}}{1} \frac{\square}{2} - \frac{\text{R}}{3} \frac{28}{4} \frac{\square}{5} / \frac{\text{Na}}{6} \frac{\text{B}}{7} - \frac{\text{D}}{8}$

NO.	Description	Options
1	Code for type	GMV=Gree Multi Variable
2	Code for model	Default: Heat pump
3	Code for function	R: R-R series
4	Nominal cooling capacity	22:2.2 kW 28:2.8 kW 36:3.6 kW.....140:14.0 kW
5	Code for unit type	P=Duct type T=Cassette type G=Wall mounted Zd=Floor ceiling A=Air handler
6	Refrigerant	Na: R410A
7	Series number	B:Product serial number
8	Power supply	D: 208-230V 60Hz

Example: GMV-R22G/NaB-D. A wall mounted indoor unit of GREE, and the nominal cooling capacity is 2.2kw. It's the second generation product, and the indoor unit is available to match with either the digital VRF or DC inverter VRF outdoor unit, the power supply is 208V-230V, 60Hz.



3 FUNCTION

3.1 Four-way Cassette Type

- ◆ Compact structure
- ◆ Powerful and even air supply
- ◆ Intelligent drainage device
- ◆ Three-dimensional spiral fan blades
- ◆ Long life and washable filter
- ◆ High efficiency air purifier
- ◆ Harmonious appearance design

3.2 Air Duct Type

- ◆ 4-step fan motor
- ◆ Flexible setup and even air supply
- ◆ Easy installation and goodlooking
- ◆ Fresh air exchange function

3.3 Wall Mounted Type

- ◆ Trinal air filter
- ◆ Quiet operation
- ◆ Aero appearance
- ◆ Wide air supply angle
- ◆ Remote controller with LCD
- ◆ Easily dismountable front panel

3.4 Floor Ceiling Type

- ◆ High efficiency filter
- ◆ Goodlooking appearance
- ◆ Space saving and easy maintenance due to flexible installation either under the ceiling or on the floor
- ◆ Human friendly air supply method thanks to wide air supply range which prevents uneven temperature distribution
- ◆ Smooth and even air supply and quiet operation thanks to high efficiency and low noise fan motor and qualified sound-proof duct design

3.5 Air Handler Type

- ◆ Remote control function: The maximum control distance of remote controller is 10m.
- ◆ Easy installation: It can be installed in up-flow or horizontal mode
- ◆ Wide range of static pressure: Its range of static pressure is from 25Pa to 100 Pa

4 PRODUCT DATA

4.1 Four-way Cassette Type

Model			GMV-R28T/Na-D	GMV-R36T/Na-D	GMV-R56T/Na-D	GMV-R71T/Na-D
Product code			CM500N0180	CM500N0190	CM500N0200	CM500N0210
Cooling Capacity	kW		2.8	3.6	5.6	7.1
	Btu/h		9550	12280	19110	24230
Heating Capacity	kW		3.2	4.0	6.3	8.0
	Btu/h		10920	13650	21500	27300
Air Flow Rate(H/M/L)	m ³ /h		680	680	1180	1180
	CFM		400	400	694	694
ESP(standard/max./range)		Pa	0	0	0	0
Sound Pressure Level (H/M/L)		dB(A)	42 /40 /38	42 /40 /38	45 /43 /41	45 /43 /41
Power Supply		V/Hz/Ph	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.035	0.035	0.035	0.035
	Running Current	A	0.32	0.32	0.45	0.45
Connecting Pipes	Gas Pipe	mm	Φ9.52	Φ12.7	Φ15.9	Φ15.9
	Gas Pipe	inch	3/8	1/2	5/8	5/8
	Liquid Pipe	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52
		inch	1/4	1/4	3/8	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)		mm	30×1.5	30×1.5	30×1.5	30×1.5
Unit Dimensions (W×D×H)		mm	840 ×840 ×190	840 ×840 ×190	840 ×840 ×240	840 ×840 ×240
Package Dimensions (W×D×H)		mm	960 ×960 ×257	960 ×960 ×257	960 ×960 ×310	960 ×960 ×310
Net Weight		kg	25.0	25.0	30.0	30.0
Gross Weight		kg	33.0	33.0	38.0	38.0
Loading Quantity (20' Container)		unit	74	74	60	60
Loading Quantity (40' Container)		unit	167	167	140	140
Loading Quantity(40' High Cube Container)		unit	171	171	156	156

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

Model			GMV-R90T/Na-D	GMV-R112T/Na-D	GMV-R125T/Na-D	GMV-R140T/Na-D
Product code			CM500N0220	CM500N0230	CM500N0240	CM500N0320
Cooling Capacity	kW		9.0	11.2	12.5	14.0
	Btu/h		30710	38210	42650	47770
Heating Capacity	kW		10.0	12.5	13.5	14.5
	Btu/h		34120	42650	46060	49470
Air Flow Rate(H/M/L)	m ³ /h		1860	1860	1860	1860
	CFM		1095	1095	1095	1095
ESP(standard/max./range)	Pa		0	0	0	0
Sound Pressure Level (H/M/L)	dB(A)		52 /50 /48	52 /50 /48	52 /50 /48	52 /50 /48
Power Supply	V/Hz/Ph		208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.06	0.06	0.06	0.06
	Running Current	A	0.68	0.68	0.68	0.68
Connecting Pipes	Gas Pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas Pipe	inch	5/8	5/8	5/8	5/8
	Liquid Pipe	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		inch	3/8	3/8	3/8	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)	mm		30×1.5	30×1.5	30×1.5	30×1.5
Unit Dimensions (W×D×H)	mm		840 ×840 ×320	840 ×840 ×320	840 ×840 ×320	840 ×840 ×320
Package Dimensions (W×D×H)	mm		960 ×960 ×394	960 ×960 ×394	960 ×960 ×394	960 ×960 ×394
Net Weight	kg		38.0	38.0	38.0	38.0
Gross Weight	kg		46.0	46.0	46.0	46.0
Loading Quantity (20' Container)	unit		52	52	52	52
Loading Quantity (40' Container)	unit		104	104	104	104
Loading Quantity (40' High Cube Container)	unit		119	119	119	119

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

4.2 Air Duct Type

Model			GMV-R22P/NaB-D	GMV-R28P/NaB-D	GMV-R36P/NaB-D	GMV-R56P/NaB-D
Product code			CM800N0760	CM800N0770	CM800N0780	CM800N0790
Cooling Capacity	kW		2.2	2.8	3.6	5.6
	Btu/h		7506	9554	12283	19107
Heating Capacity	kW		2.5	3.2	4.0	6.3
	Btu/h		8530	10918	13648	21496
Air Flow Rate(H/M/L)	m ³ /h		450	570	570	1000
	CFM		265	335	335	588
ESP(standard/max./range)	Pa		20/50	20/50	20/50	30/60
Sound Pressure Level (H/M/L)	dB(A)		37 /35 /33	39 /37 /35	39 /37 /35	44 /42 /40
Power Supply	V/Hz/Ph		208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.04	0.06	0.06	0.15
	Running Current	A	0.34	0.36	0.36	1.09
Connecting Pipes	Gas Pipe	mm	Φ9.52	Φ9.52	Φ12.7	Φ15.9
	Gas Pipe	inch	3/8	3/8	1/2	5/8
	Liquid Pipe	mm	Φ6.35	Φ6.35	Φ6.35	Φ9.52
		inch	1/4	1/4	1/4	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)	mm		Φ20×1.5	Φ20×1.5	Φ20×1.5	Φ30×1.5
Unit Dimensions (W×D×H)	mm		880 ×665 ×250	880 ×665 ×250	880 ×665 ×250	1155 ×736 ×300
Package Dimensions (W×D×H)	mm		1023×748×320	1023×748×320	1023×748×320	1248×788×375
Net Weight	kg		27.0	28.5	28.5	49.0
Gross Weight	kg		31.0	33.5	33.5	56.0
Loading Quantity(20' Container)	unit		84	84	84	42
Loading Quantity(40' Container)	unit		192	192	192	90
Loading Quantity (40' High Cube Container)	unit		192	192	192	90

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

Model			GMV-R71P/NaB-D	GMV-R90P/NaB-D	GMV-R112P/NaB-D	GMV-R140P/NaB-D
Product code			CM800N0800	CM800N0810	CM800N0820	CM800N0830
Cooling Capacity	kW		7.1	9.0	11.2	14.0
	Btu/h		24225	30708	38214	47768
Heating Capacity	kW		8.0	10.0	12.5	15.0
	Btu/h		27296	34120	42650	51180
Air Flow Rate(H/M/L)	m ³ /h		1100	1700	1700	2000
	CFM		647	1000	1000	1177
ESP(standard/max./range)	Pa		30/60	40/80	40/80	50/100
Sound Pressure Level (H/M/L)	dB(A)		45 /43 /41	48 /46 /44	48 /46 /44	50 /48 /46
Power Supply	V/Hz/Ph		208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.15	0.225	0.225	0.26
	Running Current	A	1.09	1.63	1.63	2.27
Connecting Pipes	Gas Pipe	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Gas Pipe	inch	5/8	5/8	5/8	5/8
	Liquid Pipe	mm	Φ9.52	Φ9.52	Φ9.52	Φ9.52
		inch	3/8	3/8	3/8	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection	Flare Connection
Drain Pipes(External Dia.×Thickness)	mm		Φ30×1.5	Φ30×1.5	Φ30×1.5	Φ30×1.5
Unit Dimensions (W×D×H)	mm		1155 ×736 ×300	1425 ×736 ×300	1425 ×736 ×300	1425 ×736 ×300
Package Dimensions (W×D×H)	mm		1248×788×375	1517×788×375	1517×788×375	1517×788×375
Net Weight	kg		49.0	62.0	62.0	63.5
Gross Weight	kg		56.0	71.0	71.0	73.0
Loading Quantity (20' Container)	unit		42	40	40	40
Loading Quantity(40' Container)	unit		90	90	90	90
Loading Quantity (40' High Cube Container)	unit		90	90	90	90

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

4.3 Wall Mounted Type

Model		GMV-R22G/NaG-D	GMV-R28G/NaG-D	GMV-R36G/NaG-D	GMV-R45G/NaG-D
Product code		CM100N0230	CM100N0250	CM100N0290	CM100N0310
Cooling Capacity	kW	2.2	2.8	3.6	4.5
	Btu/h	7506	9550	10280	15360
Heating Capacity	kW	2.5	3.2	4.0	5.0
	Btu/h	8530	10920	13650	17060
Air Flow Rate	m ³ /h	500	500	630	630
	CFM	294	294	371	371
ESP(standard/max./range)	Pa	0	0	0	0
Sound Pressure Level (H/L)	dB(A)	38/34	38/34	44/38	44/38
Power Supply	V/Hz/Ph	208-230/60/1			
Fan Motor	Output	kW	0.02	0.02	0.02
	Running Current	A	0.31	0.31	0.36
Connecting Pipes	Gas Pipe	mm	Φ9.52	Φ9.52	Φ12.7
		inch	3/8	3/8	1/2
	Liquid Pipe	mm	Φ6.35	Φ6.35	Φ6.35
		inch	1/4	1/4	1/4
	Connection Method		Flare Connection	Flare Connection	Flare Connection
Drain Pipes(External Dia.×Thickness)	mm	Φ28×4	Φ28×4	Φ28×4	Φ28×4
Unit Dimensions(W×D×H)	mm	843×180×275		940×200×298	
Package Dimensions(W×D×H)	mm	915×255×355		1010×380×285	
Net Weight	kg	10.5	10.5	13	13
Gross Weight	kg	12.5	12.5	16	16
Loading Quantity(20' Container)	unit	336	336	266	266
Loading Quantity(40' Container)	unit	702	702	557	557
Loading Quantity (40' High Cube Container)	unit	819	819	624	624

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

Model		GMV-R50G/NaG-D	GMV-R56G/NaG-D	GMV-R63G/NaG-D	GMV-R71G/NaG-D
Product code		CM100N0300	CM100N0360	CM100N0370	CM100N0350
Cooling Capacity	kW	5.0	5.6	6.3	7.1
	Btu/h	17060	19100	21496	24226
Heating Capacity	kW	5.8	6.3	7.0	8.0
	Btu/h	19790	21500	23885	27297
Air Flow Rate	m ³ /h	630	800	800	800
	CFM	371	471	471	471
ESP(standard/max./range)	Pa	0	0	0	0
Sound Pressure Level (H/L)	dB(A)	44/38	44/38	44/38	44/38
Power Supply	V/Hz/Ph	208-230/60/1			
Fan Motor	Output	kW	0.02	0.03	0.03
	Running Current	A	0.36	0.4	0.4
Connecting Pipes	Gas Pipe	mm	Φ12.7	Φ15.9	Φ15.9
		inch	1/2	5/8	5/8
	Liquid Pipe	mm	Φ6.35	Φ9.52	Φ9.52
		inch	1/4	3/8	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)	mm	Φ28×4	Φ28×4	Φ28×4	Φ28×4
Unit Dimensions (W×D×H)	mm	940×200×298	1008×221×319		
Package Dimensions (W×D×H)	mm	1010×285×380	1073×313×395		
Net Weight	kg	13	15	15	15
Gross Weight	kg	16	20	20	20
Loading Quantity (20' Container)	unit	266	210	210	210
Loading Quantity (40' Container)	unit	557	441	441	441
Loading Quantity (40' High Cube Container)	unit	624	503	503	503

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

4.4 Floor Ceiling Type

Model		GMV-R28Zd/NaB-D	GMV-R36Zd/NaB-D	GMV-R50Zd/NaB-D
Product code		CM600N0230	CM600N0240	CM600N0250
Cooling Capacity	kW	2.8	3.6	5.0
	Btu/h	9550	12280	17060
Heating Capacity	kW	3.2	4.0	5.8
	Btu/h	10920	13650	19790
Air Flow Rate(H/M/L)	m ³ /h	650	650	900
	CFM	383	383	530
ESP(standard/max./range)	Pa	0	0	0
Sound Pressure Level (H/M/L)	dB(A)	40	40	45
Power Supply	V/Hz/Ph	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.015	0.015
	Running Current	A	0.25	0.25
Connecting Pipes	Gas Pipe	mm	Φ9.52	Φ12.7
	Gas Pipe	inch	3/8	1/2
	Liquid Pipe	mm	Φ6.35	Φ6.35
		inch	1/4	1/4
	Connection Method		Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)	mm	Φ17×1.75	Φ17×1.75	Φ17×1.75
Unit Dimensions (W×D×H)	mm	1220×700 ×225	1220×700 ×225	1220×700 ×225
Package Dimensions (W×D×H)	mm	1340 ×820 ×300	1340 ×820 ×300	1340 ×820 ×300
Net Weight	kg	40.0	40.0	40.0
Gross Weight	kg	50.0	50.0	50.0
Loading Quantity (20' Container)	unit	66	66	66
Loading Quantity (40' Container)	unit	132	132	132
Loading Quantity (40' High Cube Container)	unit	132	132	132

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

Model		GMV-R71Zd/NaB-D	GMV-R90Zd/NaB-D	GMV-R112Zd/NaB-D	GMV-R140Zd/NaB-D
Product code		CM600N0260	CM600N0270	CM600N0280	CM600N0300
Cooling Capacity	kW	7.1	9.0	11.2	14.0
	Btu/h	24230	30710	38210	47770
Heating Capacity	kW	8.0	10.0	12.5	16.0
	Btu/h	27300	34120	42650	54590
Air Flow Rate(H/M/L)	m ³ /h	1350	1500	2100	2100
	CFM	794	882	1235	1235
ESP(standard/max./range)	Pa	0	0	0	0
Sound Pressure Level (H/M/L)	dB(A)	49	51	56	56
Power Supply	V/Hz/Ph	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1
Fan Motor	Output	kW	0.075	0.15	0.18
	Running Current	A	0.75	0.99	1.5
Connecting Pipes	Gas Pipe	mm	Φ15.9	Φ15.9	Φ15.9
	Gas Pipe	inch	5/8	5/8	5/8
	Liquid Pipe	mm	Φ9.52	Φ9.52	Φ9.52
		inch	3/8	3/8	3/8
	Connection Method		Flare Connection	Flare Connection	Flare Connection
Drain Pipes (External Dia.×Thickness)		mm	Φ17×1.75	Φ17×1.75	Φ17×1.75
Unit Dimensions (W×D×H)		mm	1420 ×700 ×245	1420 ×700 ×245	1700 ×700 ×245
Package Dimensions (W×D×H)		mm	1545 ×825 ×330	1545 ×825 ×330	1825 ×825 ×330
Net Weight		kg	51.0	54.0	64.0
Gross Weight		kg	60.0	63.0	72.0
Loading Quantity (20' Container)		unit	48	48	58
Loading Quantity (40' Container)		unit	98	98	118
Loading Quantity (40' High Cube Container)		unit	98	98	127

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

4.5 Air Handler Type

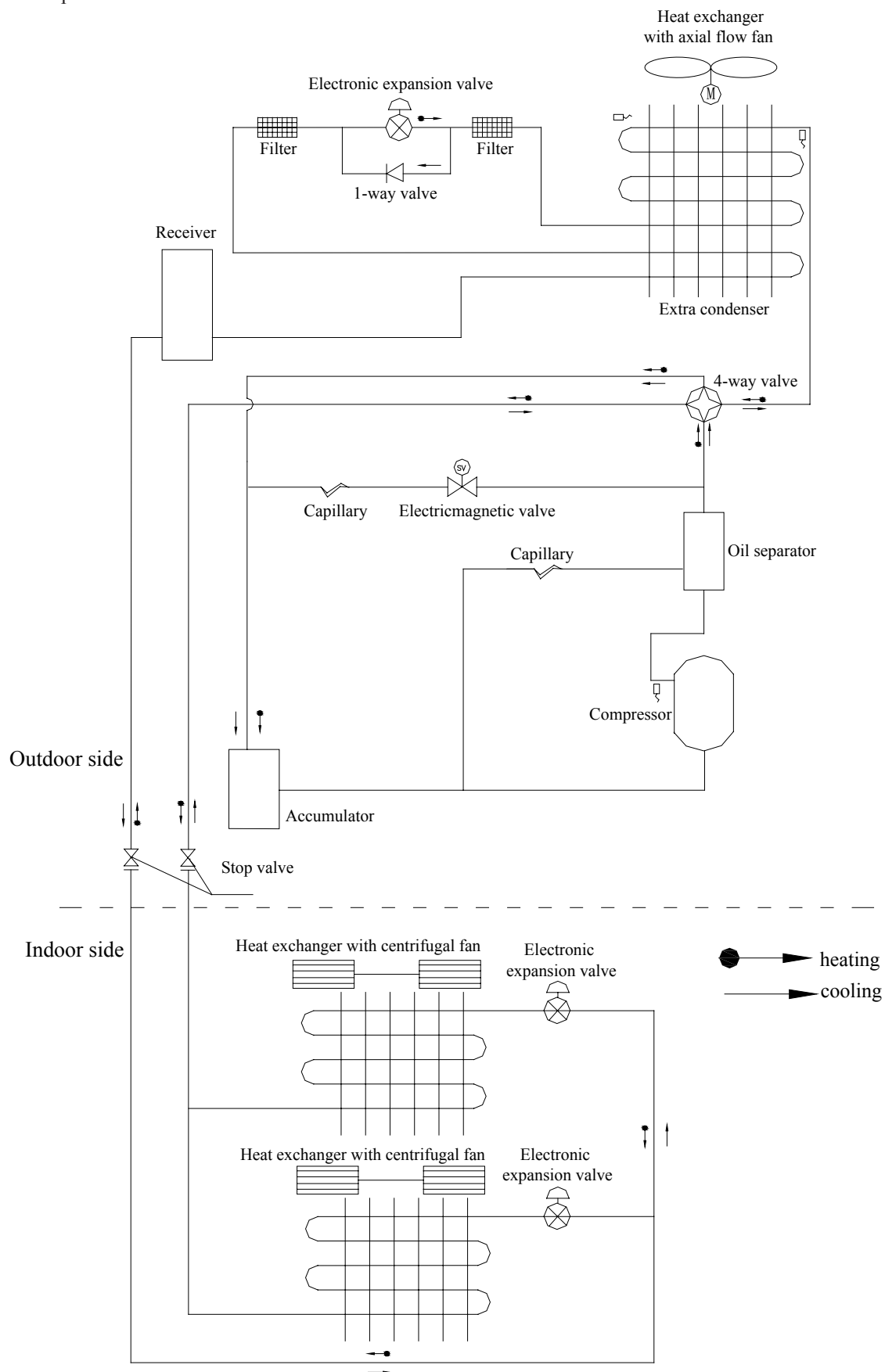
Model		GMV-R71A/Na-D	GMV-R100A/Na-D	GMV-R140A/Na-D	
Product code		CM700N0010	CM700N0020	CM700N0030	
Cooling Capacity	kW	7.1	10.0	14.0	
	Btu/h	24230	34120	47770	
Heating Capacity	kW	8.0	11.0	15.0	
	Btu/h	27300	37530	51180	
Air Flow Rate(H/L)	m ³ /h	1100	1700	2300	
	CFM	647	1000	1354	
ESP(standard/max./range)	Pa	25	37	75	
Sound Pressure Level	dB(A)	46	48	56	
Power Supply		V/Hz/Ph	208-230/60/1		
Fan Motor	Output	kW	0.062	0.25	0.375
	Running Current	A	0.65	1.65	2.60
Connecting Pipes	Gas Pipe	mm	Φ15.9	Φ15.9	Φ15.9
		inch	5/8	5/8	5/8
	Liquid Pipe	mm	Φ9.52	Φ9.52	Φ9.52
		inch	3/8	3/8	3/8
	Connection Method		brazing connection	brazing connection	brazing connection
Drain Pipes (External Dia.×Thickness)		mm	/	/	/
Unit Dimensions (W×D×H)		mm	533 ×541 ×1105	533 ×541 ×1254	622 ×541 ×1254
Package Dimensions (W×D×H)		mm	597 ×572 ×1160	607 ×572 ×1280	656 ×622 ×1280
Net Weight		kg	56.0	64.0	72.0
Gross Weight		kg	63.0	71.0	82.0
Loading Quantity (20’ Container)		unit	72	36	27
Loading Quantity (40’ Container)		unit	152	76	54
Loading Quantity (40’ High Cube Container)		unit	152	152	108

Notes:

- ① . Refer to the product nameplate for parameters and specification of the unit;
- ② . The model GMV is heat pump type. The model with the lastcode of “D” is single phase.
- ③ . The sound level is tested under circumstance of semi-anechoic chamber; the value of noise could be a little higher in actual operation.

5 PIPING DIAGRAM

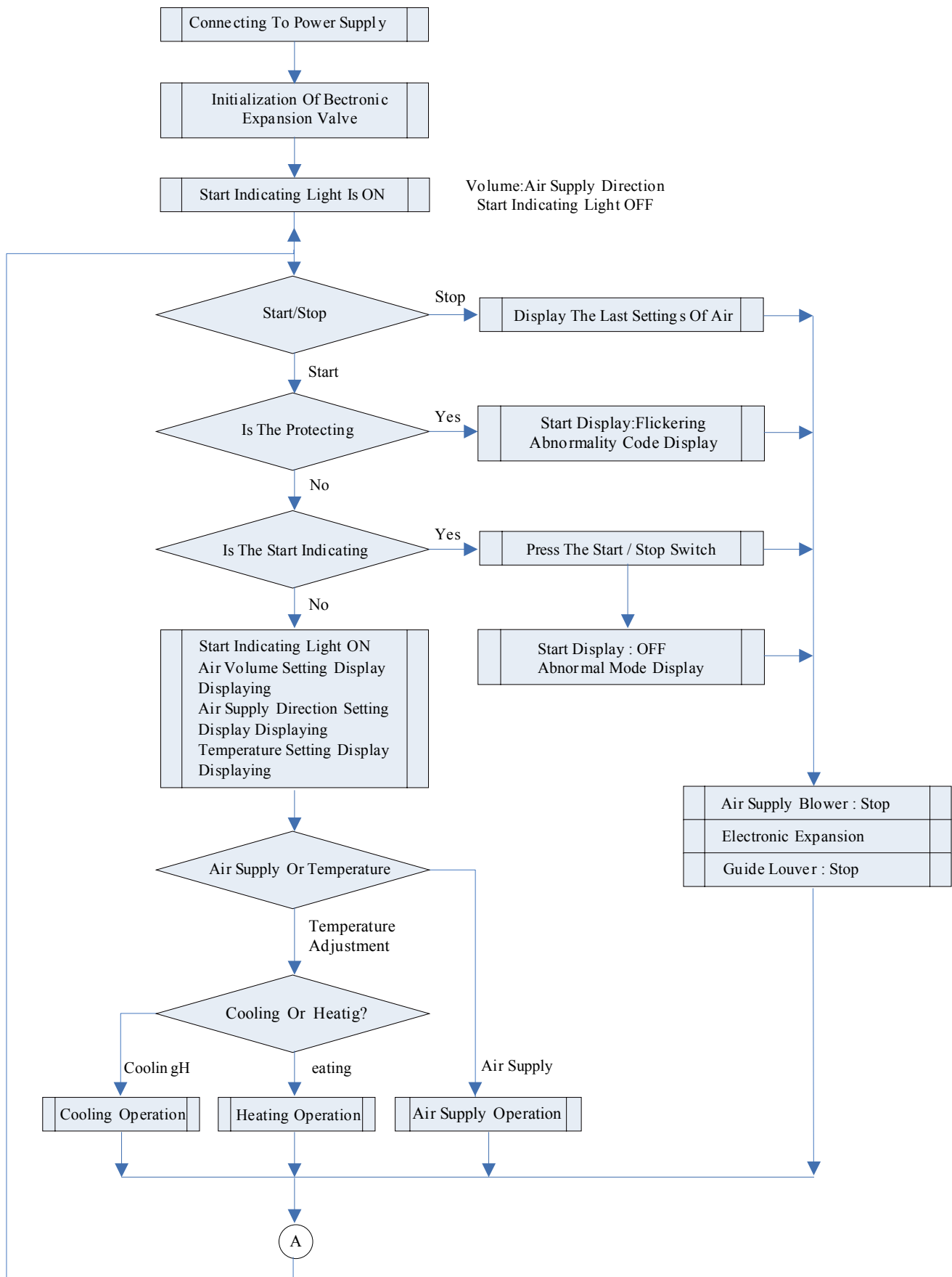
Heat Pump



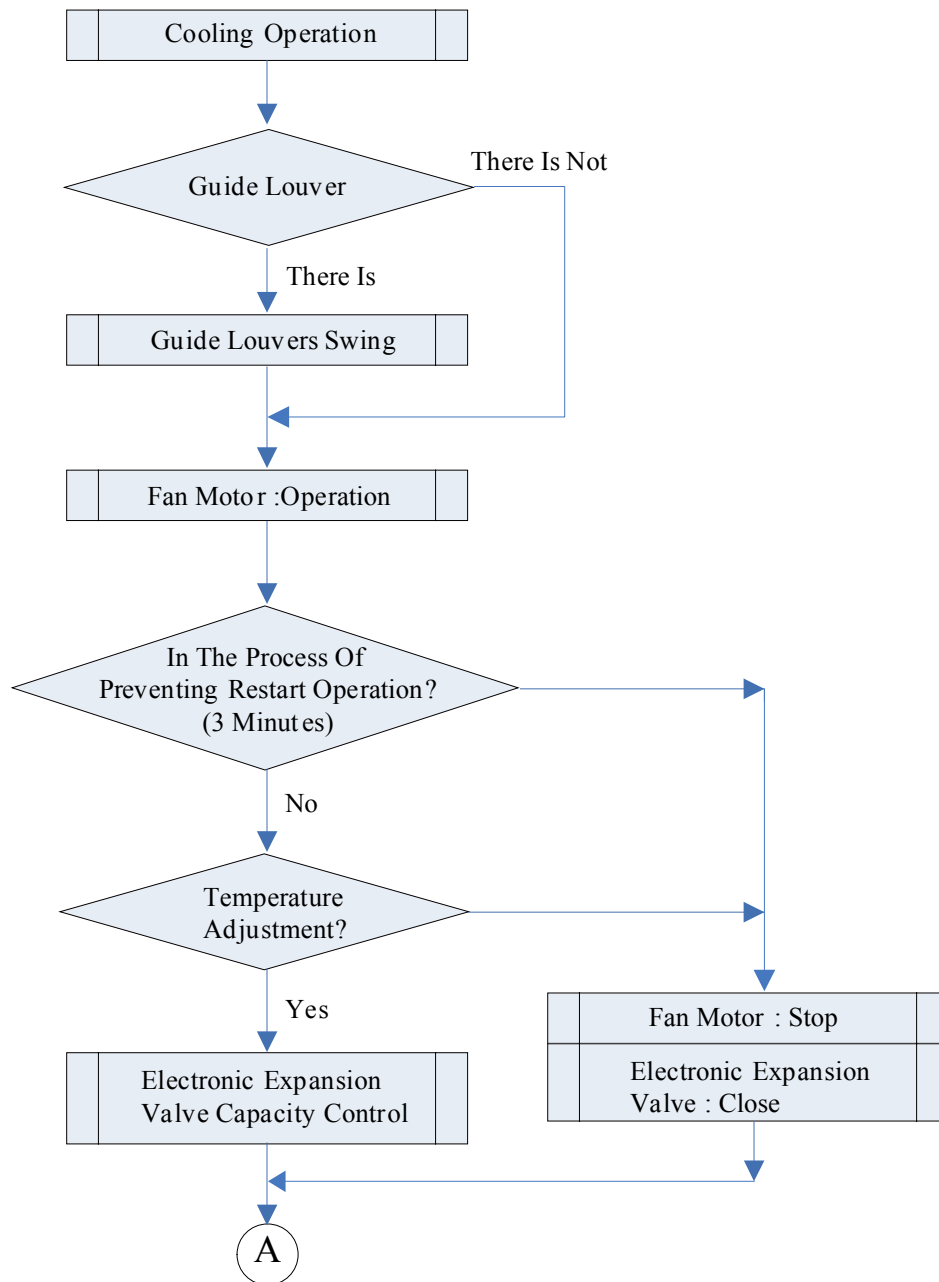
CONTROL

CONTROL

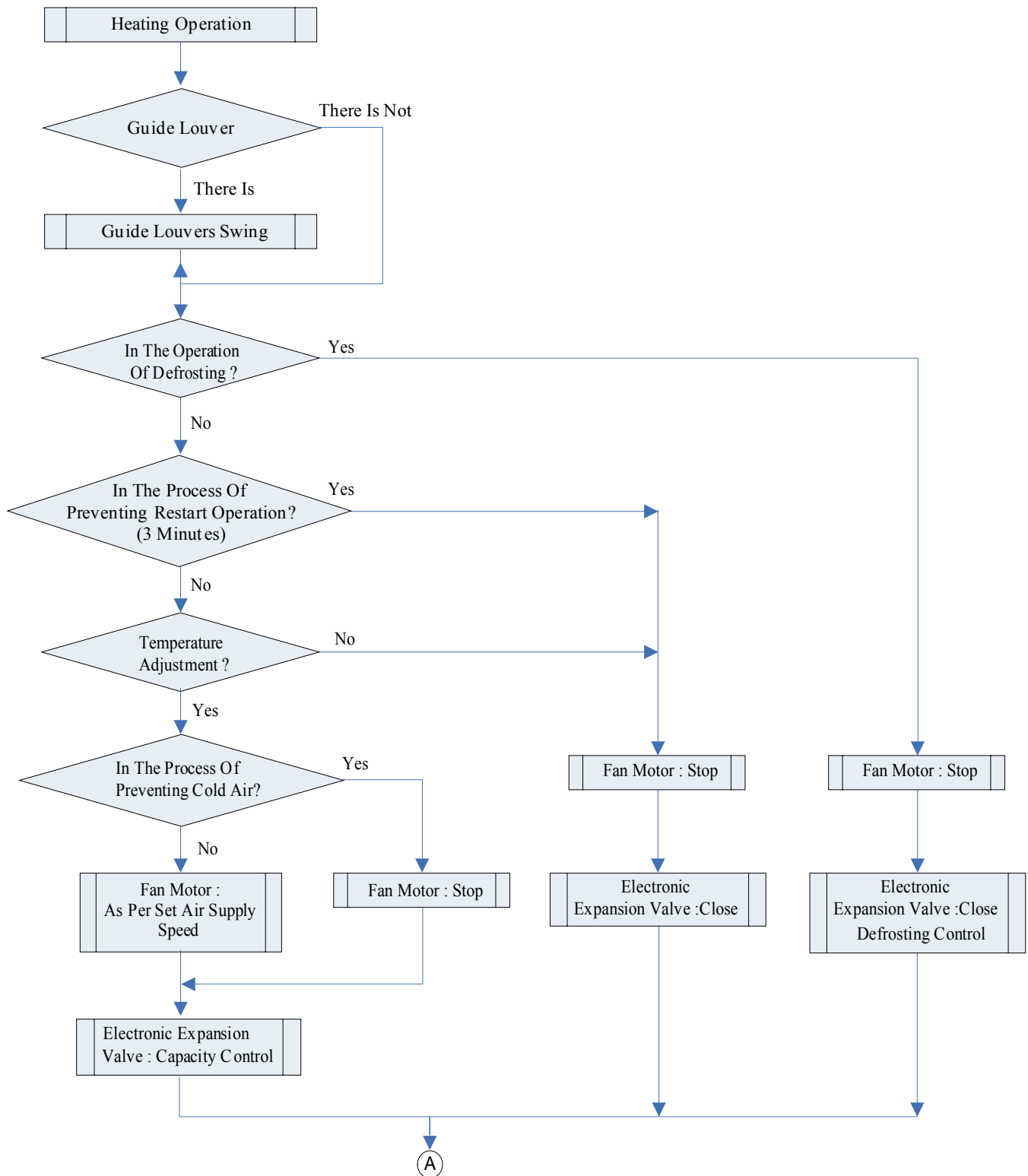
1 OPERATION FLOWCHART



1.1 Cooling/Dry Operation



1.2 Heating Operation



2 WIRELESS REMOTE CONTROLLER

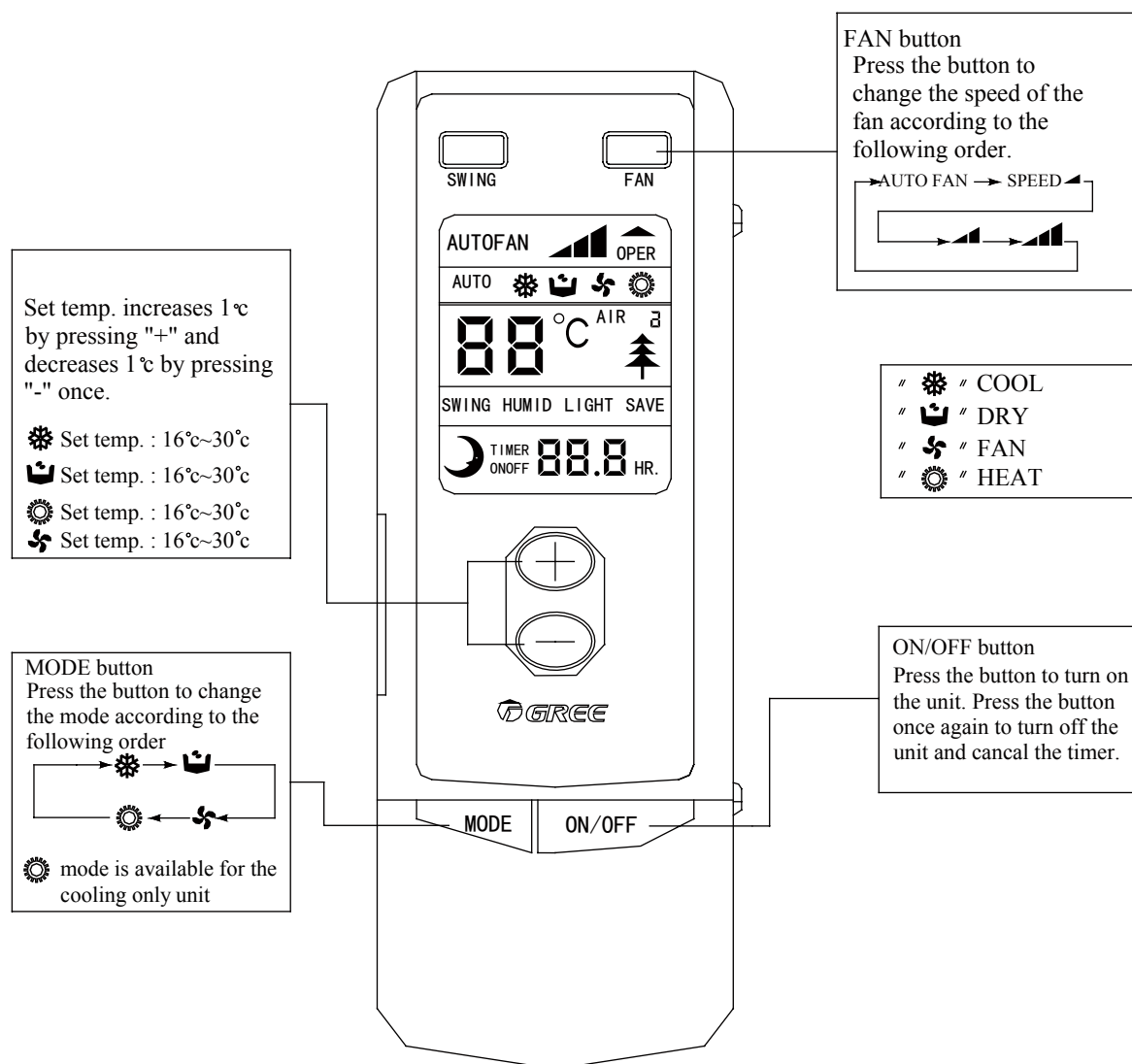
This Service Manual contain two wireless remote controller, Y512 and YB1FA. Y512 is applicable to Cassette Type Air Duct type and Air Handler Type. YB1FA is applicable to Wall Mounted Type and Floor Ceiling Type.

2.1 Wireless Remote Controller Y512



NOTE!

- ◆ Make sure that there is no obstruction between the remote control and the signal receptor.
- ◆ The remote control signal can be received at the distance of up to about 10m.
- ◆ Don't drop or throw the remote control.
- ◆ Don't let any liquid flow into the remote control.
- ◆ Don't put the remote control directly under the sunlight or any place where is very hot.

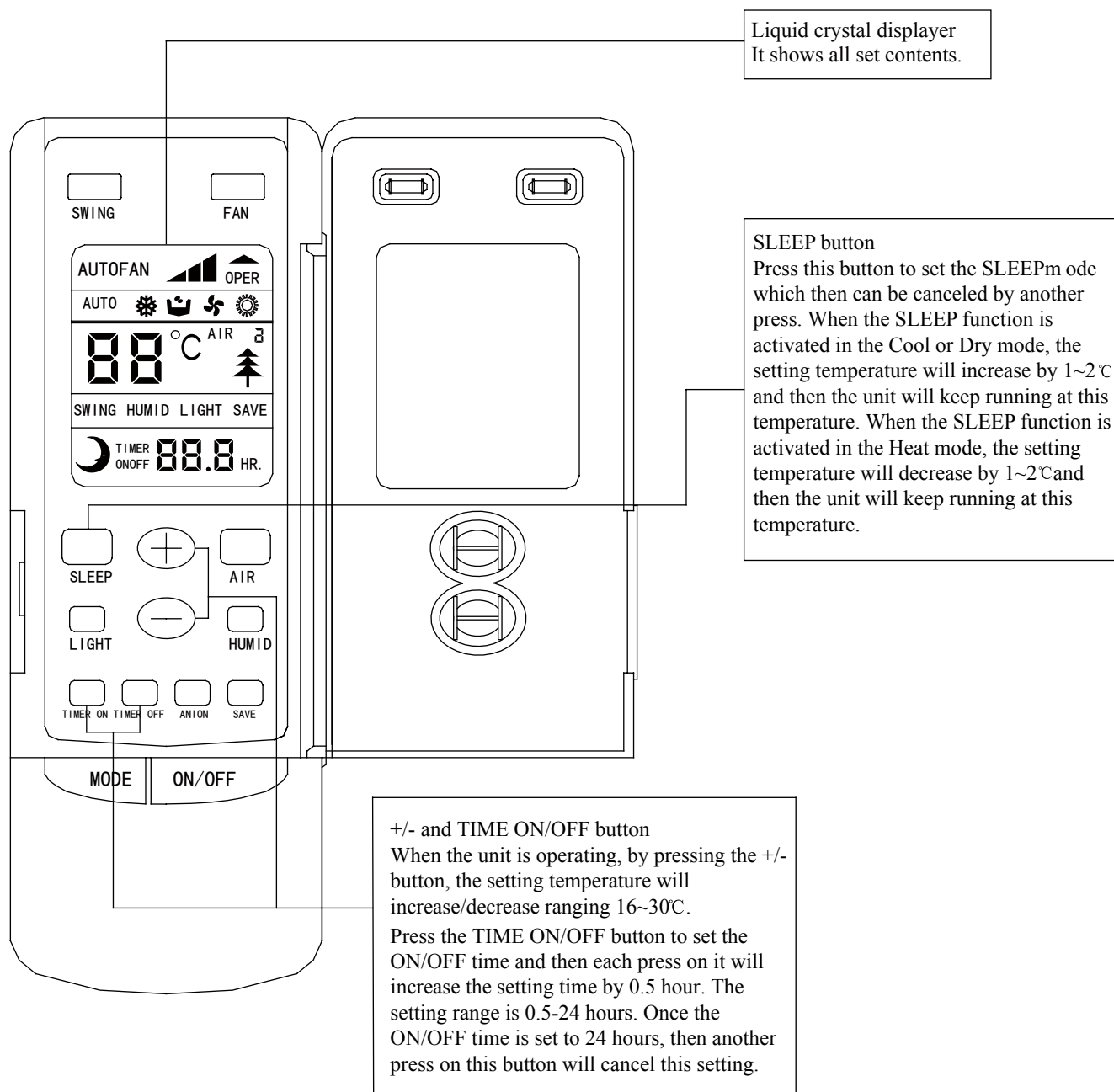


NOTE!

After every indoor unit received the turn off signal, the fan and electric inflate valve will continue to work for 20-70 seconds to make use of the rest cool or rest heat, while for preparation for the next work. And this is normal phenomenon.

NOTE!

This type of remote control is a kind of general use remote control that is suitable for several types (function) of air conditioner units. Please understand that the functions and buttons that are not suitable for this air conditioner will not be introduced.



2.1.1 Operation procedure

Normal procedure

- 1) Press ON/OFF button after connected with the power, then the unit is operating.
- 2) Press MODE button to choose the need operation mode.
- 3) Press FAN button to set the fan speed.
- 4) Press +/- button to set the need temp.

Selectable procedure

- 5) Press SLEEP mode to set the sleep state.
- 6) Press TIMER OFF button to set the set time.

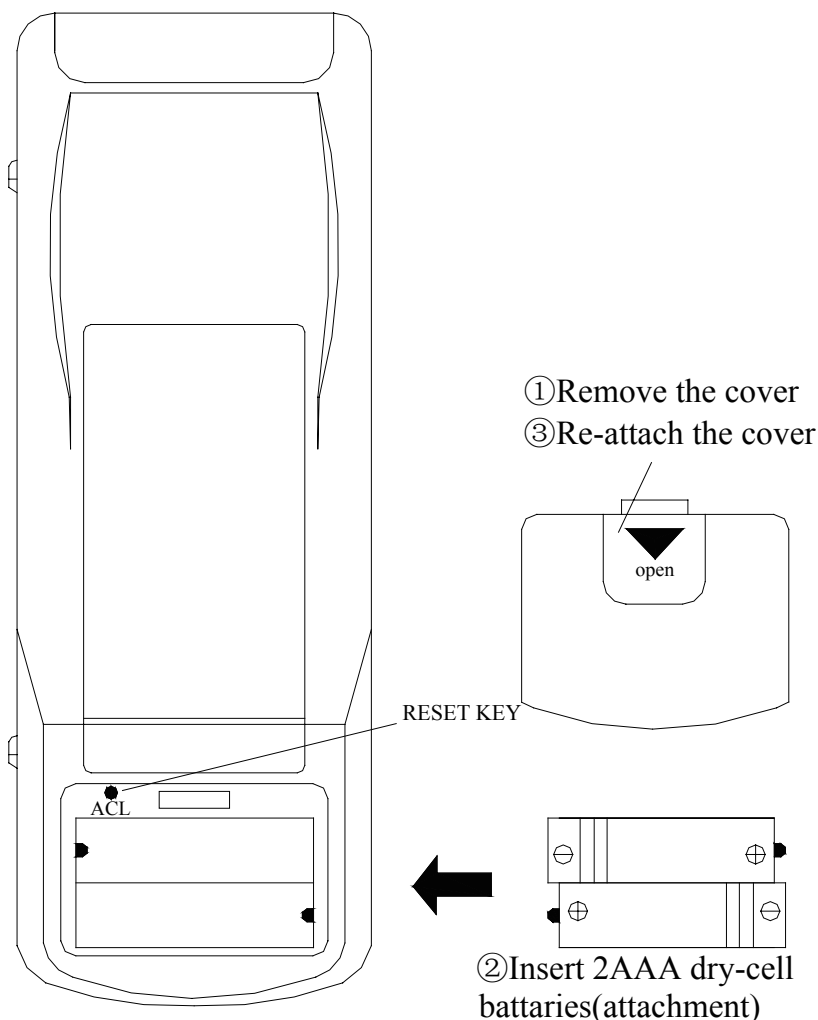
NOTE:

When the operating mode selected by the indoor unit is clash with the one selected by the outdoor unit, the remote controller will display the operating clash after 5 seconds and the power light will flicker, then the indoor unit turns off. At this time, the units will become normal after the operating mode of the indoor unit is changed to cooperate with the outdoor unit. Cool mode can cooperate with dry mode, and fan mode can cooperate with any mode.

3.1.2 How to insert batteries

Two batteries (Two AAA dry-cell batteries) are used by the remote control

- 1) Remote the cover from the back of the remote control downward, take out the worn batteries and insert two new ones (Make sure the two poles are correct)
- 2) Re-attach the cover.



- 1) All the prints and code no. will be showed on the displayer after the insert of batteries. The remote control can be operated after 10sec.
- 2) The lifetime of the batteries is about one year.
- 3) Don't confuse the new and worn or different types of batteries.
- 4) Remove batteries when the remote control is not in use for a longtime to avoid mal-function caused by liquid leakage.
- 5) The remote control should be placed about 1m or more from the TV set or any other electric appliances.
- 6) The remote control should be used in the receivable range (the reception range is 10m)
- 7) When the remote control can not be controlled in the situation of inserted batteries, please remove the back cover and press "ACL" button to make it normal.

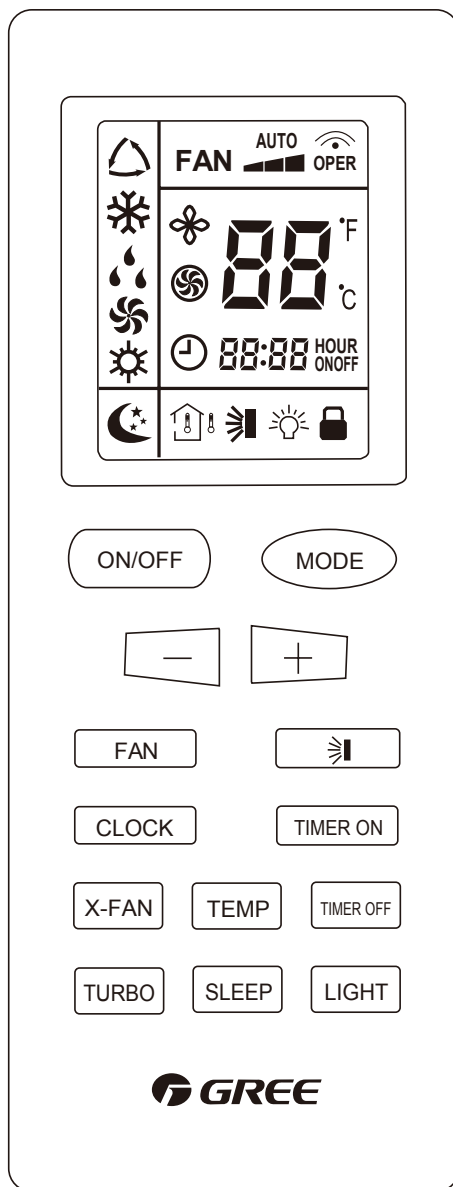
2.2 Wireless Remote Controller YB1FA

2.2.1 Names and functions of wireless remote control



NOTE:

Be sure that there are no obstructions between receiver and remote controller; Don't drop or throw the remote control; Don't let any liquid in the remote control and Note: Be sure that there are no obstructions between receiver and remote controller; Middle fan put the remote control directly under the sunlight or any place where is very hot.

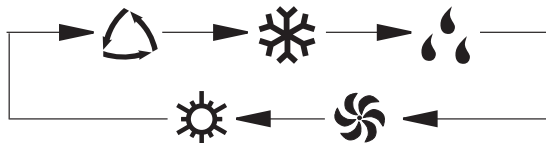


◆ ON/OFF

Press this button, the unit will be turned on, press it once more, the unit will be turned off. When turning on or turning off the unit, the Timer, Sleep function will be canceled, but the presetting time is still remained.

◆ MODE

Press this button, Auto, Cool, Dry, Fan, Heat mode can be selected circularly. MODE button MODE Auto mode is default while power on. Under Auto mode, the temperature will not be displayed; Under Heat mode, the initial value is 28°C (82 °F). ; Under other modes, the initial value is 25°C (77 °F).

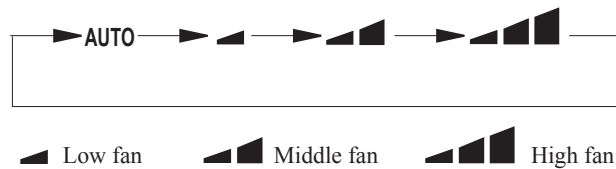


◆ SLEEP

Press this button, Sleep On and Sleep Off can be selected. After powered on, Sleep SLEEP button SLEEP Off is defaulted. After the unit is turned off, the Sleep function is canceled. After Sleep function set up, the signal of Sleep will be displayed. In this mode, the time of timer can be adjusted. Under Fan and Auto modes, this function is not available.

◆ FAN

Press this button, Auto, Low, Middle, High speed can be circularly selected. After FAN button FAN powered on, Auto fan speed is default. Under Dehumidify mode, Low fan speed only can be set up.



◆ CLOCK

Press this button, the clock can be set up, signal ⌚ blink and display. Within 5 CLOCK button CLOCK seconds, the value can be adjusted by pressing + or - button, if continuously press this button for 2 seconds above, in every 0.5 seconds, the value on ten place of Minute will be increased 1. During blinking, repress the Clock button, signal ⌚ will be constantly displayed and it denotes the setting succeeded. After powered on, 12:00 is defaulted to display and signal ⌚ will be displayed. If there is signal ⌚ be displayed that denotes the current time value is Clock value, otherwise is Timer value.

◆ LIGHT

Press this button at unit On or Off status, Light On and Light Off can be set up. LIGHT button LIGHT After powered on, Light On is defaulted.

Notice: This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model doesn't have, if press the corresponding button on the remote controller that the unit will keep the original running status.

◆ X-FAN:

Pressing X -FAN button in COOL or DRY mode, the icon ⚙️ is displayed and the indoor fan will continue operation for 10 minutes in order to dry the indoor unit even though you have turned off the unit.

After energization, X-FAN OFF is defaulted. X-FAN is not available in AUTO, FAN or HEAT mode.

◆ -

Presetting temperature can be decreased. Press this button, the temperature can be - button-set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the °C (°F) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent by if pressing this button.

◆ +

For presetting temperature increasing. Press this button, can set up the temperature, when unit is on. Continuously press and hold this button for more than 2 seconds, the corresponding contents will be changed rapidly, until unpress the button then send the information, °C (°F) is displaying all along. In Auto mode, the temperature can not be set up, but operate this button can send the signal. Centigrade setting range :16-30; Fahrenheit scale setting range 61-86.

◆ TEMP

Press this button, could select displaying the indoor setting temperature or indoor ambient temperature. When the indoor unit firstly power on it will display the setting temperature, if the temperature's displaying status is changed from other status to "⌚", displays the ambient temperature, 5s later or within 5s, it receives other remote control signal that will return to display the setting temperature. if the users haven't set up the temperature displaying status, that will display the setting temperature. (This function is applicable to partial of models)

After powered on, the setting temperature displaying is defaulted, (according to customers requirements to display, if there is no requirement that will default to display the presetting temperature and there is no icon displayed on wireless remote control). Press this button, (When displaying ⌚), will display presetting temperature; (when displaying ⌚) will display indoor ambient temperature, TEMP button TEMP ⌚ current displaying status will not be changed. If current displays indoor ambient temperature, if received the other remote control signal, it will display presetting temperature, 5s later, will back to display the ambient temperature. (This function is applicable to partial of models)

◆ TURBO

In Cool or Heat mode, press this button can turn on or turn off the Turbo function. After turned on the Turbo function, its signal will be displayed. When switching the mode or changing fan speed, this function will be canceled automatically.



Press this button, to set up swing angle, which circularly changes as below:



This is an universal use remote controller. If remote controller sends the following three kinds of status that the swing status of main unit will be:



When the guide louver start to swing up and down, if turn off the Swing, the air guide louver will stop at current position. which indicates the guide louver swings up and down between that all five positions.

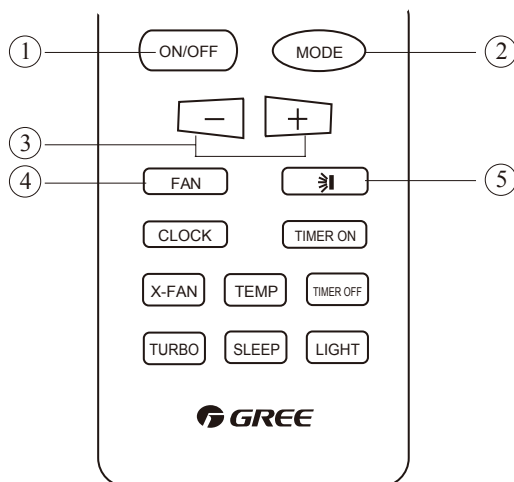
◆ TIMER ON

Timer On setting: Signal “ON” will blink and display, signal will conceal, the numerical section will become the timer on setting status. During 5 seconds blink, by pressing + or - button to adjust the time value of numerical section, every press of that button, the value will be increased or decreased 1 minute. Hold pressing + or - button, 2 seconds later, it quickly change, the way of change is: During the initial 2.5 seconds, ten numbers change in the one place of minute, then the one place is constant, ten numbers change in the tens place of minute at 2.5 seconds speed and carry. During 5s blink, press the Timer button, the timer setting succeeds. The Timer On has been set up, repress the timer On button, the Timer On will be canceled. Before setting the Timer, please adjust the Clock to the current actual time.

◆ TIMER OFF

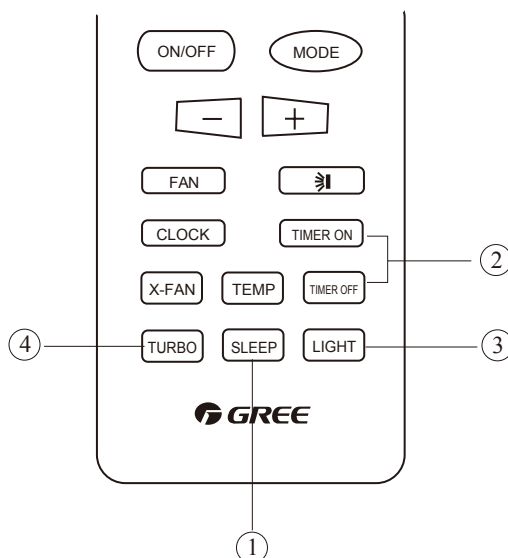
Once press this key to enter into TIMER OFF setup, in which case the TIMER OFF icon will blink. The method of setting is the same TIMER OFF as for TIMER ON.

2.2.2 Guide for operation- General operation



- ① . After powered on, press ON/OFF button, the unit will start to run.(Note: When it is powered off, the guide louver of main unit will close automatically.)
- ② . Press MODE button, select desired running mode, or press COOL or HEAT mode to enter into the corresponding operation directly.
- ③ . Pressing +or - button, to set the desired temperature. (It is unnecessary to set the temp. at AUTO mode.)
- ④ . Pressing FAN button, set fan speed, can select AUTO FAN, LOW, MID and HIGH.
- ⑤ . Pressing button, to select the swing.

2.2.3 Guide for operation- Optional operation



- ①. Press SLEEP button, to set sleep.
- ②. Press TIMER ON and TIMER OFF button, can set the scheduled timer on or timer off.
- ③. Press LIGHT button, to control the on and off of the displaying part of the unit (This function may be not available for some units).
- ④. Press TURBO button, can realize the ON and OFF of TURBO function.

2.2.4 Introduction for special function

◆ About blow function

This function indicates that moisture on evaporator of indoor unit will be blown after the unit About blow function is stopped to avoid mould. 1. Having set blow function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for about 10 min. at low speed. In this period, press blow button to stop indoor fan directly. 2. Having set blow function off: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

◆ About AUTO RUN

When AUTO RUN mode is selected, the setting temperature will not be displayed on the LCD, the unit will be in accordance with the room temp. automatically to select the suitable running method and to make ambient comfortable.


◆ About turbo function

If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temp. approaches the preset temp. as soon as possible.

◆ About Blow over heat (This function is applicable to partial of models)



When the unit is running in Heat mode or Auto Heat mode, compressor and indoor fan is running, to turn the unit off, the compressor, outdoor fan will stop running. The upper and lower guide board rotate to horizontal position, then the indoor fan will run at low fan speed, 10s later, the unit will turn off.

◆ About lock

Press + and - buttons simultaneously to lock or unlock the keyboard. If the remote controller is locked, the icon  will be displayed on it, in which case, press any button, the mark will flicker for three times. If the keyboard is unlocked, the mark will disappear.

◆ About swing up and down

1. Press swing up and down button continuously more than 2s, the main unit will swing back and forth from up to down, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.

2. Under swing up and down mode, when the status is switched from off to , if press this button again 2s later,  status will switch to off status directly; if press this button again within 2s, the change of swing status will also depend on the circulation sequence stated above.


◆ About switch between Fahrenheit and Centigrade

Under status of unit off, press MODE and - buttons simultaneously to switch °C and °F.

◆ About new function of defrosting

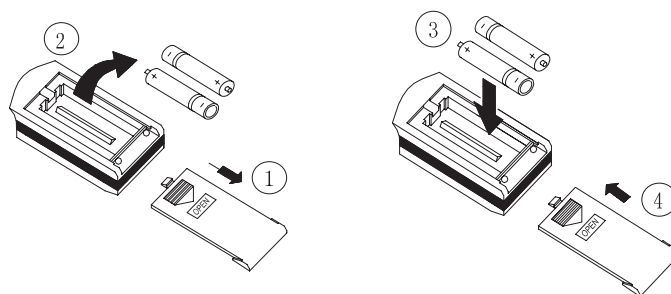
It indicates: after starting this function by remote controller and the unit has been under defrost status, If turn off the unit by remote controller, the unit will not stop defrosting until it is finished; if change setting mode by remote controller, the function ,which is set last time, won't be carried out until defrosting finished. Operation of this function on or off: If remote controller is under off status, press mode button and blow button simultaneously in order to enter or cancel this new function. If the unit is under defrost mode, dual eight position on remote controller will display H1.If switch to heat mode,the position will display H1, which flickers for 5s, in which case, press +/- button, H1 will disappear and setting temp. be displayed. After remote controller is powered on, the new defrost function will be defaulted to be closed.

2.2.5 Changing batteries and notices

- 1) Slightly to press the place with  , along the arrowhead direction to push the back cover of wireless remote control. (As show in figure)
- 2) Take out the old batteries. (As show in figure)
- 3) Insert two new AAA1.5V dry batteries, and pay attention to the polarity. (As show in figure)
- 4) Attach the back cover of wireless remote control. (As show in figure)

NOTE:

- ◆ When changing the batteries, do not use the old or different batteries, otherwise, it can cause the malfunction of the wireless remote control.
- ◆ If the wireless remote control will not be used for a long time, please take them out, and don't let the leakage liquid damage the wireless remote control.
- ◆ The operation should be in its receiving range.
- ◆ It should be placed at where is 1m away from the TV set or stereo sound sets.
- ◆ If the wireless remote control can not operate normally, please take them out, after 30s later and reinsert, if they cannot normally run, please change them.



3 WIRED REMOTE CONTROLLER

3.1 Wired Controller Z60351F,Z60151F,Z63351F,Z63151F

3.1.1 Operation View

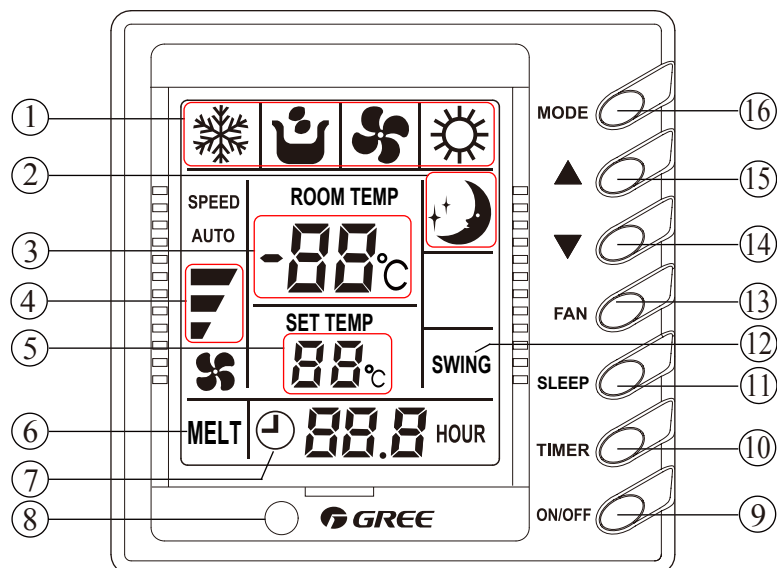


Fig.3.1.1.1 Wired Controller Z60351F,Z60151F

Various Components of Wired Remote Controller			
1	Operating mode display (Cool, Dry, Fan, Heat)	9	On/Off button
2	Sleep mode display	10	Timer button
3	Environmental temp. display / Malfunction display	11	Sleep button
4	Fan control display (automatic, high, media, low)	12	Swing display
5	Set Temp. display	13	Fan control button
6	Defrosting display	14	Temp./ Timer decrease button
7	Timer display	15	Temp./ Timer increase button
8	Signal receptor	16	Mode button

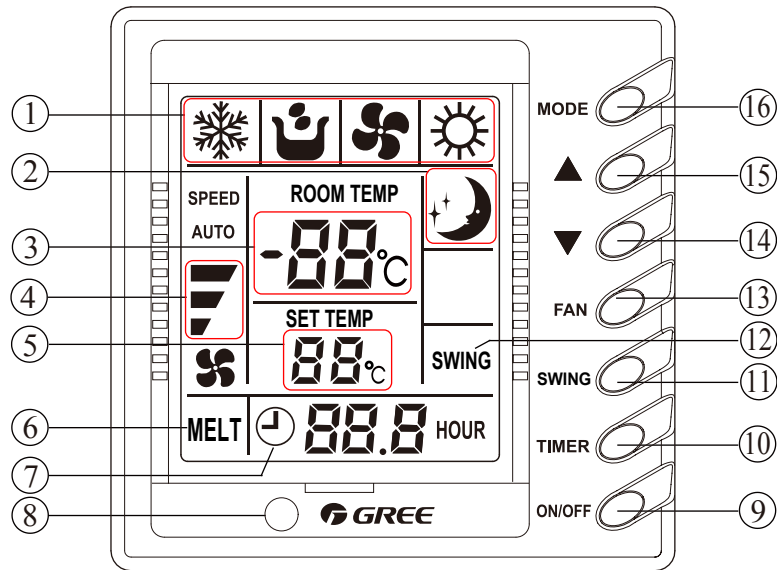


Fig3.1.2.2 Wired Controller Z63351F,Z63151F

Every part of wired remote controller			
1	Operating mode display (Cool, Dry, Fan, Heat)	9	On/Off button
2	Sleep mode display	10	Timer button
3	Environmental temp.display / Malfunction display	11	Swing button
4	Fan control display (automatic, high, media, low)	12	Swing display
5	Set Temp. display	13	Fan control button
6	Defrosting display	14	Temp. / Timer reducing button
7	Timer display	15	Temp. / Timer rising button
8	Signal receptor	16	Mode button

3.1.2 Dimension

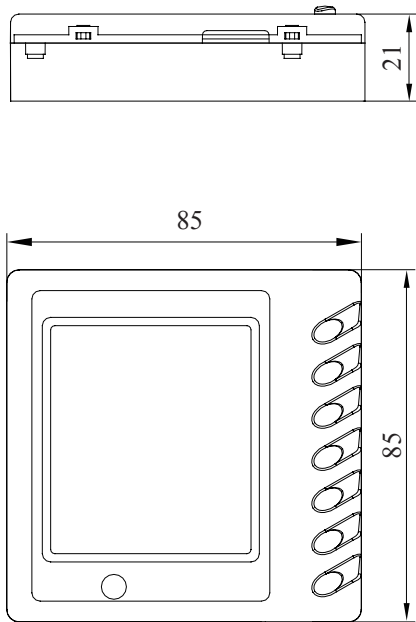


Fig.3.1.2.1 Outline Dimension of Wired Controller

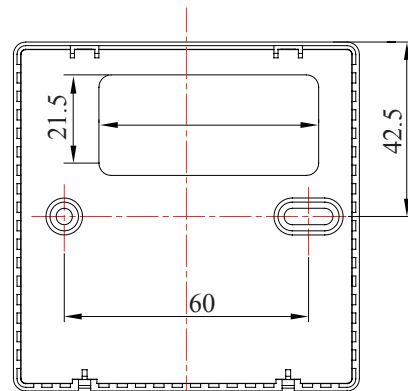


Fig.3.1.2.2 Installation Dimension of Wired Controller

3.1.3 Installation

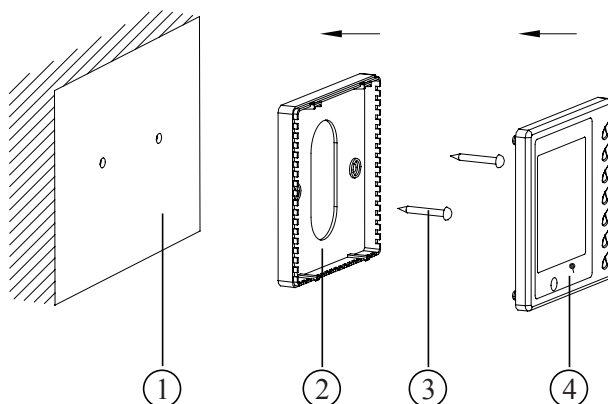


Fig.3.1.3

SN	1	2	3	4
Name	Casing base, installed into the wall	Controller Soleplate	Screw M4X25	Controller Panel

Notice for installation under the guidance of Fig.3.1.3

- ① . Cut off power supply before install the electrical components, it is forbidden to carry out the installation with power on;
- ② . Get one end of the 4 core communication cable, put it through the rectangular hole on the base board on the wire remote controller;
- ③ . Hold the base board of controller on the wall, then fix it to the wall with M4x25 screw;
- ④ . Plug the 4 core communication cable into the slot on the wired remote controller, then fix the controller panel with base board together;

3.2 Wired Controller XK02

3.2.1 Operation View

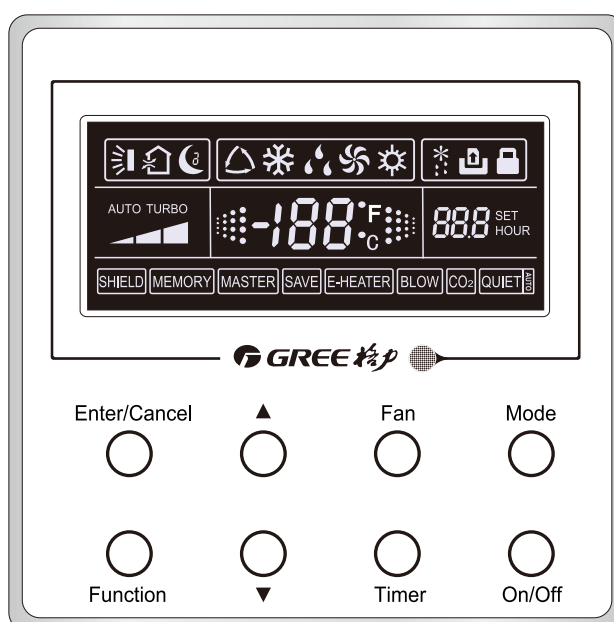


Fig.3.2.1.1

Denotation	Name	Function
	Swing	Swing function
	Sleep	Sleep states (3 types: sleep 1, sleep2 and sleep 3)
	Running mode	Running modes of the indoor unit (Cooling, Dry, Fan and Heating)
	Cooling	Cooling mode
	Dry	Dry mode
	Fan	Fan mode
	Heating	Heating mode
	Defrost	Defrosting state
	Gate-control card	Gate control
	Lock	Lock state
	TURBO	Turbo state
	Speed	High, middle, low or auto fan speed of the indoor unit
	Twinkle	It blinks under on state of the unit without operation of any button.
	Temperature	Ambient/preset temperature value
	Timing	Timing state
	SHIELD	Shield state (buttons, temperature, On/Off, Mode or Save is shielded by the remote monitor.
	MEMORY	Memory state (The indoor unit resumes the original setting state after power failure and then power recovery)
	MASTER	Master wired controller
	SAVE	Energy-saving state
	E-HEATER	Electric auxiliary heating state
	BLOW	Blow state
	QUIET	Quiet state(two types: quiet and auto quiet)

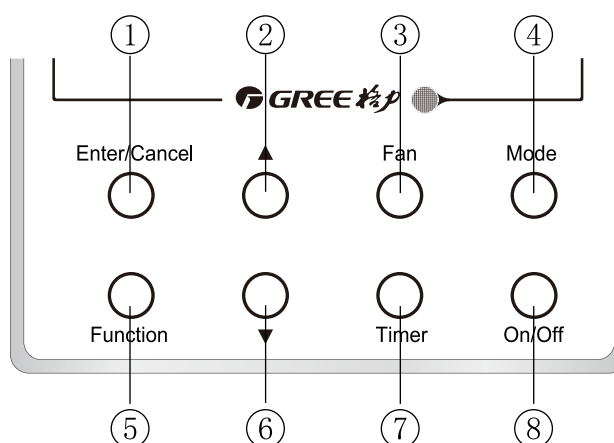


Fig.3.2.1.2

No.	Button(s)	Function(s)
1	Enter/cancel	1. Function selection and cancellation; 2. Press it for 5s to examine the outdoor ambient temperature.
2	▲	1. Running temperature setting of the indoor unit, range : 16~30°C 2. Timer setting, range:0.5-24hr 3. Switchover between quiet/auto quiet or among sleep1/ sleep2 / sleep 3
6	▼	
3	Fan	Setting of the high/middle/low/auto fan speed
4	Mode	Setting of the Cooling/Heating/Fan/Dry mode of the indoor unit
5	Function	Switchover among the functions of Swing/Sleep/Turbo/Master/Save/E-heater/Blow /Quiet etc.
7	Timer	Timer setting
8	On/Off	Turn on/off the indoor unit
4 + 2	Mode + ▲	Press them for 5s under off state of the unit to enter/cancel the Memory function (If memory is set, indoor unit after power failure and then power recovery will resume the original setting state. If not, the indoor unit is defaulted to be off after power recovery. Memory off is default before delivery.)
3 + 6	Fan + ▼	By pressing them at the same time under off state of the unit, ❄ will be displayed on the wired controller for the cooling only unit, while ☀ will be displayed on the wired controller for the cooling and heating unit.
2 + 6	▲ + ▼	Upon startup of the unit without malfunction or under off state of the unit, press them at the same time for 5s to enter the lock state, in which case, any other buttons won't respond the press. Repress them for 5s to quit this state.
4 + 5	Mode + Func	1. By pressing them under off state of the unit at the same time, the address of the wired controller will be displayed at once; 2. By pressing them for 5s under off state of the unit at the same time, the address setting is available.
1 + 5	Enter/Cancel + Func	By pressing them simultaneously, the address of the master wired controller will be displayed.
2 + 5	▲ + Func	By pressing them for 5s under off state of the unit at the same time, the control of the master wired controller can be canceled.
4+6	Mode + ▼	When the unit is turned off, press them for 5 seconds simultaneously, display panel will switch between °C and °F.
5+6	Function+ ▼	In any conditions, press them for 5 seconds to review status. Under reviewing status, Mode changes to "00" in temp display area and press "▲"/"▼" to adjust the display. Timer display area will show the s/n of error and error code. The final error shown is the 5th error.

3.2.2 Dimension

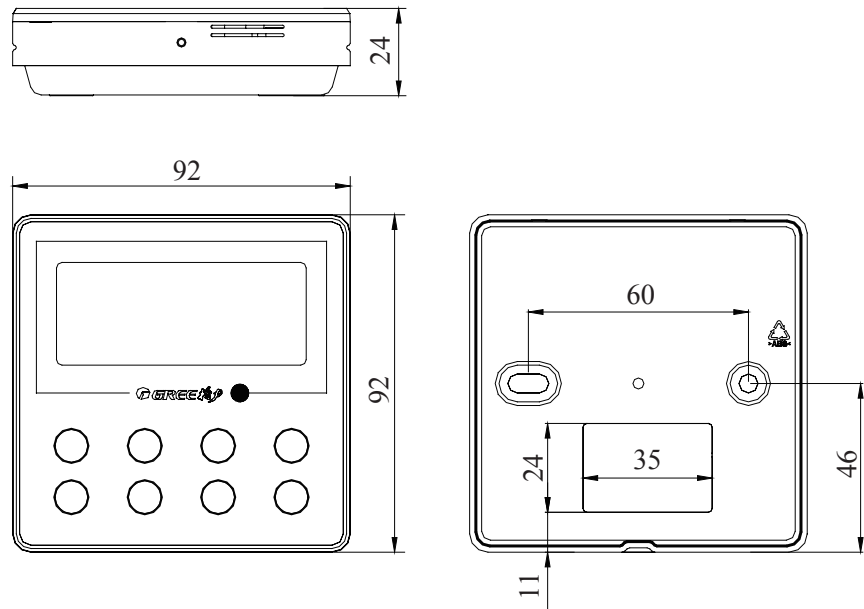


Fig.3.2.2

3.2.3 Installation of Wired Controller

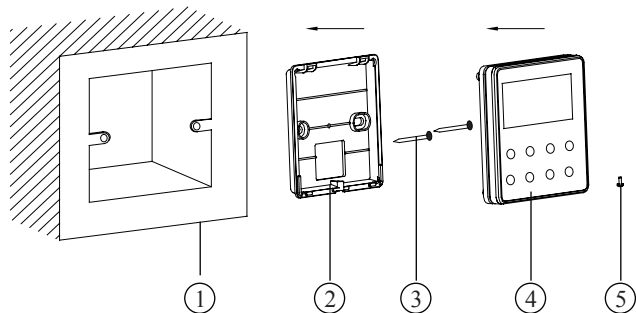


Fig.3.2.3

No.	1	2	3	4	5
Name	Socket housing installed in wall	Base plate of controller	Screw M4X25	Control Panel	Screw ST2.2X6.5

Notice for installation under the guidance of Fig.3.2.3

- ① . Cut off power supply before install the electrical components, it is forbidden to carry out the installation with power on;
- ② . Get one end of the 4 core communication cable, put it through the rectangular hole on the base board on the wire remote controller;
- ③ . Hold the base board of controller on the wall, then fix it to the wall with M4x25 screw;
- ④ . Plug the 4 core communication cable into the slot on the wired remote controller, then fix the controller panel with base board together;

NOTE:See the T1/R410A/60Hz DC Inverter VRF Outdoor Unit Service Manual for other detailed control information related to the regional controller ZJA011, smart zone controller CE50-24/E, centralized controller CE51-24/E(M), and key-card control board MK03 etc.

INSTALLATION





INSTALLATION

1 PRECAUTIONS FOR INSTALLATION

1.1 Precautions for Safety

◆ Before installation, please ensure if the installing site, power ratings, possible operating range (pipe distance, height difference between indoor and outdoor unit, power voltage) and installing space are correct and suitable. The outdoor unit is general to all models according to its power.

◆ To ensure correct installation, please make sure to read the Safety Considerations thoroughly before starting the installation works

◆ The considerations stated below are classified into  WARNING and  CAUTION. Those that might cause death or severe injury in case of wrong installation are identified in  WARNING. However, those that are stated in  CAUTION may also cause severe accidents sometimes. Therefore, both of them relate to important safety considerations and must be strictly followed.

◆ After completing the installation and test run and confirming that all are normal, please introduce to the client on how to use and repair the machine according to the Operating Instructions. Besides, please deliver the considerations herein to the clients together with the Operating Instructions, and ask them to keep properly.

WARNING!

◆ The installation shall be performed by the vendor or professional dealer from which you buy the machine. If you install by yourself, any improper installation might cause water leakage, electric shock or fire accident.

◆ The installation shall be done correctly according to installation instructions. Improper installation may cause water leakage, electric shock or fire.

◆ To install a large air-conditioning system in a small room, please make sure to take measures to prevent that the refrigerant will not exceed the limit concentration in case of leakage. For the measures to prevent the refrigerant from exceeding the limit concentration, please consult your dealer. If no proper measures, it might cause human suffocation in case of refrigerant leakage

◆ Please install at a position that is strong enough to support the weight of machine. If the installing position is of low strength, the machine may drop down and thus cause human injury.

◆ Please carry out installation in accordance with the rules for preventing the typhoon or earthquake. The machine may tip over if the installation does not comply with the requirements.

◆ The electrical cabling shall be carried out by qualified electricians in accordance with the Safety Code for Electrical Equipment, relevant local rules and the installation instructions. Make sure to use the special-purpose circuit. If the power circuit capacity is low or the construction is improper, it might cause electric shock or fire accidents.

◆ Please use suitable cables and connect them securely. Please fix the terminal joints securely. The terminal connection shall not be affected due to any external force applied onto the cable. Improper connection and fixing may cause heating and fire accidents

◆ Keep the cables in correct shape and prevent them from protruding upward. Please protect them securely with repair board. Improper installation may cause heating and fire accidents.

◆ When erecting or relocating the air conditioner, do not let any air enter into cooling circulation system except the specified refrigerant. If any air is mixed, abnormal high pressure will occur in the cooling circulation system, thus causing crack or human injury accidents.

◆ During installation, please always use the attached parts or designated parts. Failure to use the designated parts may cause water leakage, electric shock, fire or refrigerant leakage.

CAUTION

◆ Please earth securely. Do not connect the earth wires to gas pipe, water pipe, lightning rod or telephone line. Improper earthing might cause electric shock.

◆ Leakage circuit breaker must be installed at some place. No installation of leakage circuit breaker might cause electric shock.

◆ Do not install at a place where inflammable gas might leak. Gas leakage and despot around the machine might cause fire accidents.

◆ To ensure correct drainage of water, the drainage pipe shall be installed according to the installation instructions. Also the heat insulation shall be provided to avoid condensing. Improper installation of the pipe might result in water leakage and lead to possible wetting of the articles in the room.

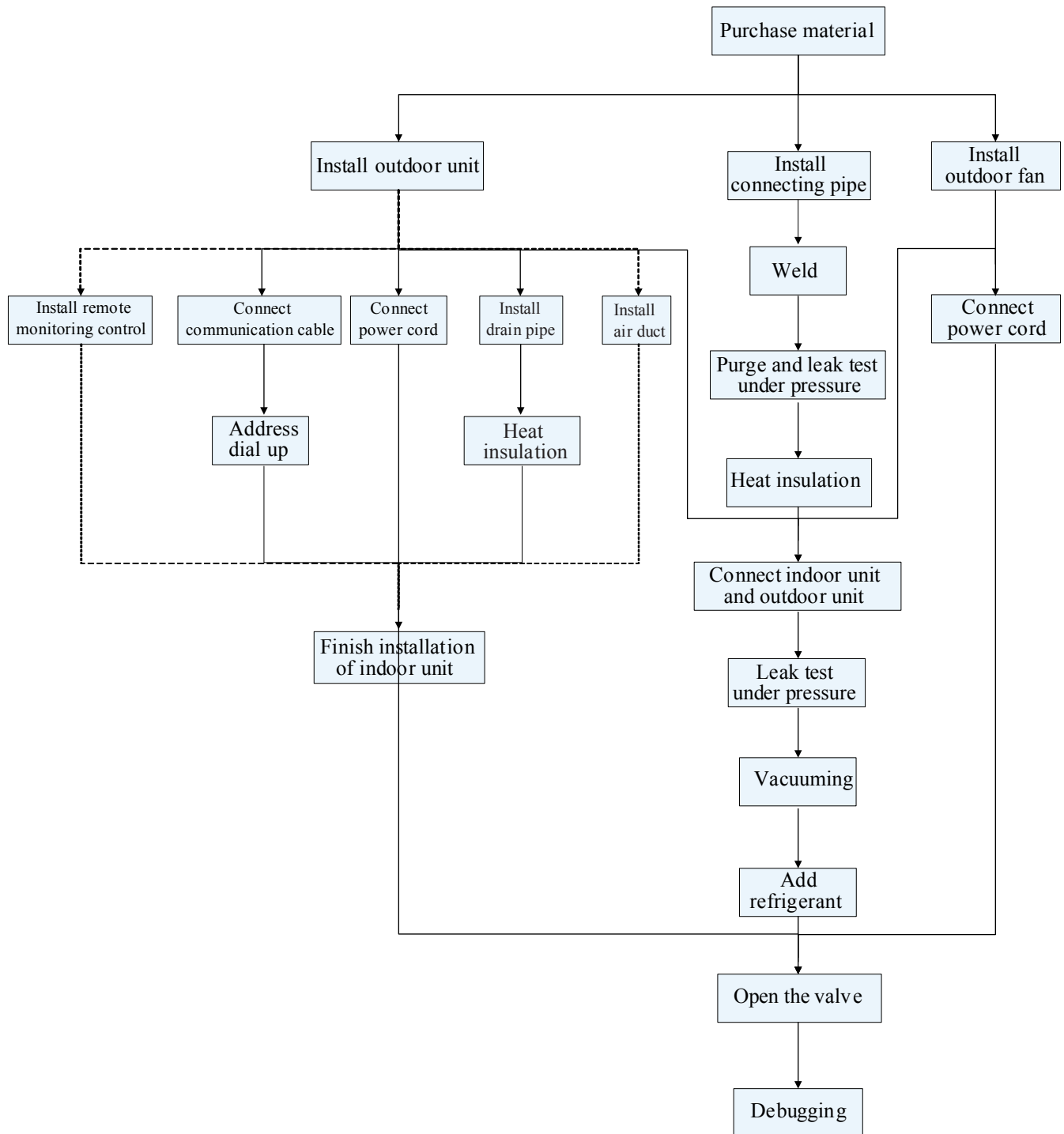
1.2 Key Points of Installation

Installation Procedures			Description and Acceptance Criteria
Material Selection and Equipment Inspection			1) The materials specified on the engineering drawing shall be purchased as specified (e.g. copper tube, thermal insulation tube, PVC pipe, power cables, air switch, etc); 2) The materials not specified on the engineering drawing shall be purchased according to the actual quantity of works (e.g. hanger frame, cable duct, etc); 3) Check if the outdoor unit, indoor unit, communication wires and accessories are complete.
Installation of indoor unit	Communication wire	Connection	1) The power cables shall be separated from communication wires at a least distance of 10cm. 2) To avoid breaking the communication wires, please do not use strong force; 3) For multiple units, please mark them properly. 4) Switch on indoor and outdoor unit, and ensure there is no display of “Communication Wire Error E6”.
		Address dial code	1) Each indoor unit under the same system has a unique address dial code. 2) The wired controller and its corresponding indoor unit have the same address dial code.
	Remote Control		1) Select the remote control mode; 2) The centralized controller and communication module shall be installed free from the source of interference.
	Power cord		1) The power cable must meet the specifications. 2) The indoor units under the same system must be arranged under unified power supply.
	Drainage Pipe	Installation	1) The PVC pipes must meet the specifications. 2) A specific gradient must be provided along the water flow direction. 3) Carry out water detection after installation. 4) Carry out thermal insulation to the drainage pipe only after the water detection is accepted.
		Thermal insulation	1) The thermal insulation tube must meet the specifications. 2) Seal between the thermal insulation pipes to avoid air entry.
	Installation of Air Duct (when with high static pressure duct-type unit)		1) Design the length of air duct according to static pressure; 2) The air inlet shall be optimally designed to avoid too small size.
Installation of connection pipes	Welding		1) The copper tube must meet the specifications. 2) Ensure it is dry and clean inside the tube. 3) Make sure to charge nitrogen as required for protection when welding the tubes. 4) Please keep to the welding process and ensure the system free of leakage. 5) Add a dual-way filter on liquid pipe side. 6) For multiple systems, please mark them properly. 7) Carry out leakage detection under pressure after welding.
	Purge and make leakage detection under pressure		1) Purge the system clean. 2) Keep the pressure for 24 hours. 3) Except for the influence by temperature, it is deemed acceptable if pressure drop is within 0.02MPa. (With the temperature change by 1℃, the pressure will change by approx. 0.01MPa).
	Thermal insulation		1) The thermal insulation tube must meet the specifications. 2) Seal between the thermal insulation pipes to avoid air entry.
Installation of outdoor unit			1) Select the installing position correctly. 2) Build the foundation according to the anchor bolt position and the dimension of outdoor unit; 3) Build the damping device properly. 4) Avoid sharp knock when handling the outdoor unit. The inclination angle shall not be higher than 15°.
Connection of indoor unit and outdoor unit			1) Tighten the nuts; 2) Provide proper protection to the outdoor connection pipe, communication wires and power supply.
Leakage detection under pressure			1) Keep the pressure for 24 hours. Except for the influence by temperature, it is deemed acceptable if pressure drop is within 0.02MPa. (With the temperature change by 1℃, the pressure will change by approx. 0.01MPa).
Vacuuming			1) Establish vacuum simultaneously in the gas pipe and liquid pipe; 2) The vacuuming time shall be long enough. 3) Put still for 1 hour after vacuuming. It is deemed acceptable if the pressure will not rise.
Add refrigerant			Add refrigerant according to the volume as specified on the engineering drawing.
Open the valve of outdoor unit			
Commissioning of complete unit			

Remarks:

- Described above are general working procedures. The procedures might vary with the site conditions.
- For detailed installation rules, please see the description in each chapter.

2 FLOW CHART OF INSTALLATION



3 INSTALLATION OF INDOOR UNIT

3.1 Four-way Cassette Type

NOTE:The picture of the units is only for reference, everything goes by with the real object.

3.1.1 Selection of Installation Site

- 1) Obstruct should put away from the intake or outlet vent of the indoor unit so that the airflow can be blown though all the room.
- 2) Make sure that the installation had accord with the requirement of the schematic diagram of installation spaces.
- 3) Select the place where can stand 4 times of the weight of the indoor unit and would not increase the operating noise and oscillate.
- 4) The horizontally of the installation place should be guaranteed.
- 5) Select the place where easy drain condensated coagulated water, and easy connect with outdoor unit.
- 6) Make sure that there are enough space for care and maintenance. Make sure that the weight between the indoor unit and ground is above 1800mm.
- 7) When installing the steeve bolt, check if the install place can stand the weight 4 times of the unit's. If not, reinforce before installation. (Refer to the install cardboard and find where should be reinforced)

There will be lots of lampblack and dust stick on the acentric, heat exchanger and water pump in dining room and kitchen, which would reduce the capacity of heat exchanger, lead water leakage and abnormal operation of the water pump. The following treatment should be taken under this circumstance:

Ensure that the smoke trap above cooker has enough capacity to obviate lampblack to prevent the indraft of the lampblack by the air conditioner.

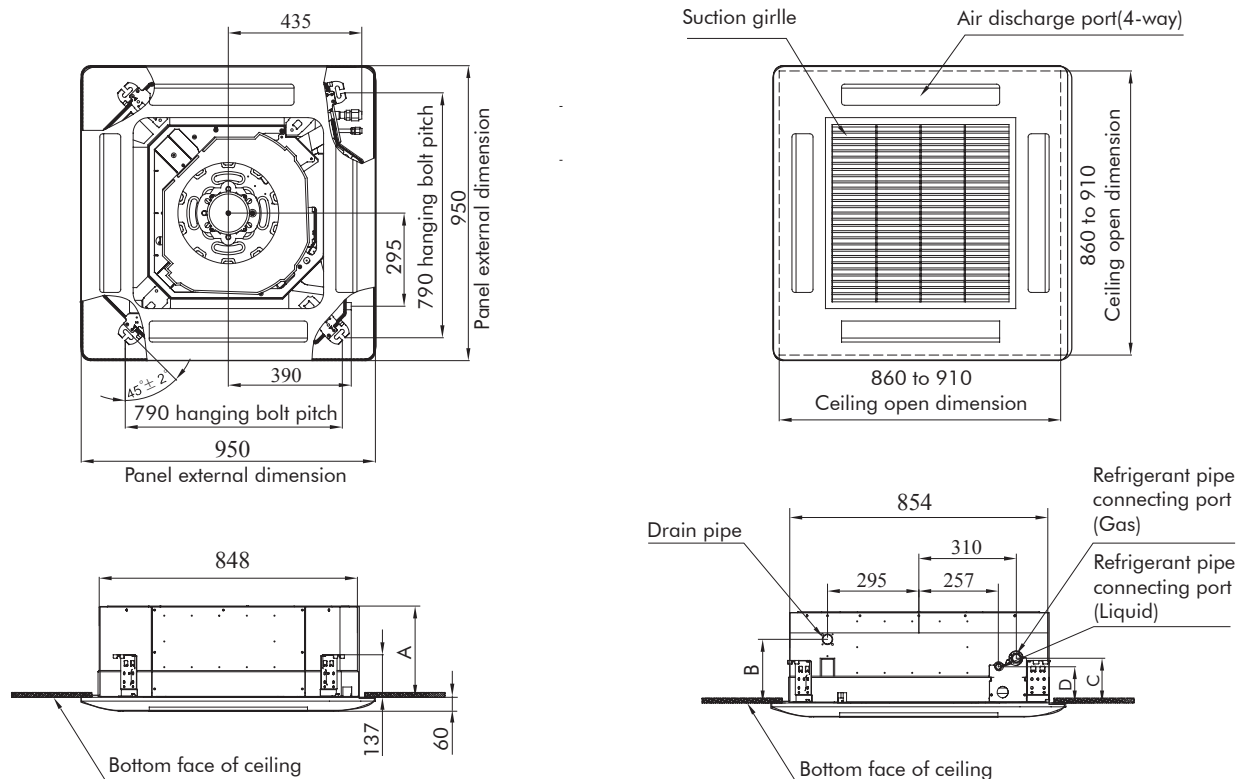
Keep the air conditioner far from the kitchen so that the lampblack would not be indraft by the air conditioner.

Important notice:

- ◆ To guarantee the good performance, the unit must be installed by professional personnel according with this instruction.
- ◆ Please contact the local Gree special nominated repair department before installation. Any malfunction caused by the unit that is installed by the department that is not special nominated by Gree would not deal with on time by the inconvenience of the business contact.

3.1.2 Dimensions Data

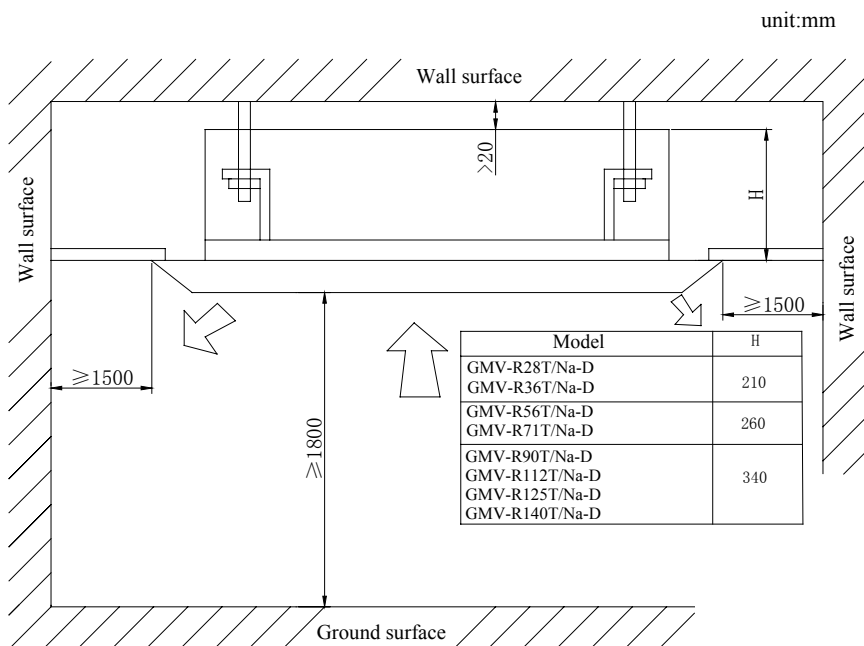
GMV-R28T/Na-D,GMV-R36T/Na-D,GMV-R56T/Na-D,GMV-R71T/Na-D, GMV-R90T/Na-D,GMV-R112T/Na-D,GMV-R125T/Na-D,GMV-R140T/Na-D,



Unit:mm

Model	A	B	C	D
GMV-R28T/Na-D,GMV-R36T/Na-D	190	157	115.5	88.5
GMV-R56T/Na-D,GMV-R71T/Na-D	240	204	142	115
GMV-R90T/Na-D,GMV-R112T/Na-D GMV-R125T/Na-D,GMV-R140T/Na-D	320	200	142	115

3.1.3 Clearance data



3.1.4 Installation demonstration

1) The primary step for install the indoor unit.

◆ When attach the hoisting stand on hoisting screw, do use nut and gasket individually at the upper and lower of the hoisting stand to fix it. The use of gasket anchor board can prevent gasket break off.

2) Use install cardboard

◆ Please refer to the install cardboard about the dimension of ceiling opening.

◆ The central mark of the ceiling opening is marked on the install cardboard.

◆ Install the install cardboard on the unit by bolt (3 piece), and fix the angle of the drainage pipe at the outlet vent by bolt.

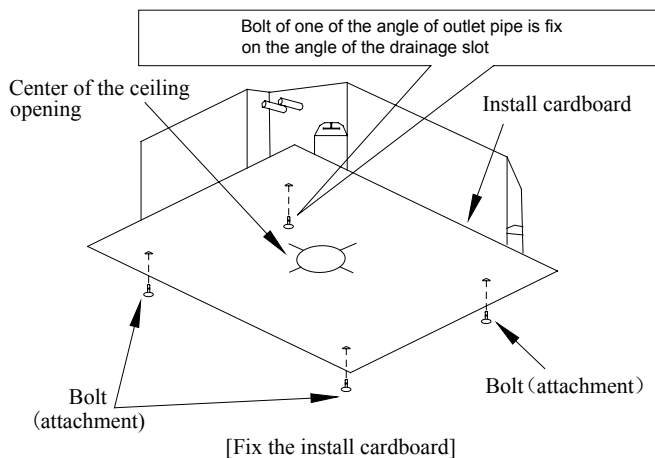
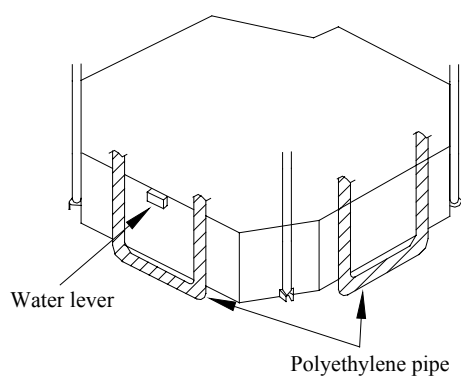
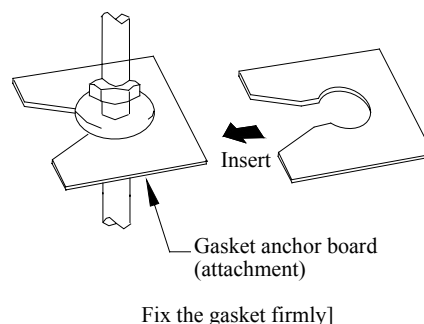
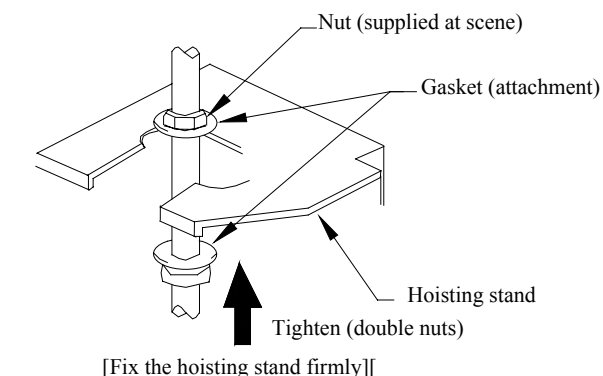
3) Adjust the unit to the suitable install place. (Refer to the fig.2)

4) Check if the unit is horizontal.

◆ Inner drainage pump and bobber switch are included in the indoor unit, check if 4 angle of every unit are horizontal by water lever. (If the unit is slant toward the opposite of the coagulate water flow, there may be malfunction of the bobber switch and lead water drop.)

5) Backout the gasket anchor board used to prevent gasket break off and tighten the nut on it.

6) Backout the install cardboard.



Note:

Please do tighten the nuts and bolts to prevent air conditioner break off.

● **Connect the refrigerant pipe**

◆ When connect the pipe to the unit or backout it from the unit, please do use both spanner and torque wrench. as shown in fig.3.1.4.

◆ When connect, smear both inside and outside of the flare nut with freeze motor oil, screw it by hand and then tighten it with spanner.

◆ Refer to form 1 to check if the wrench had been tightened (too tight would mangle the nut and lead leakage).

◆ Examine the connection pipe to see if it had gas leakage, then take the treatment of heat insulation, as shown in the fig.3.

◆ Only use median sponge to entwine the wiring interface of the gas pipe and heat preservation sheath of the gas collection tube.

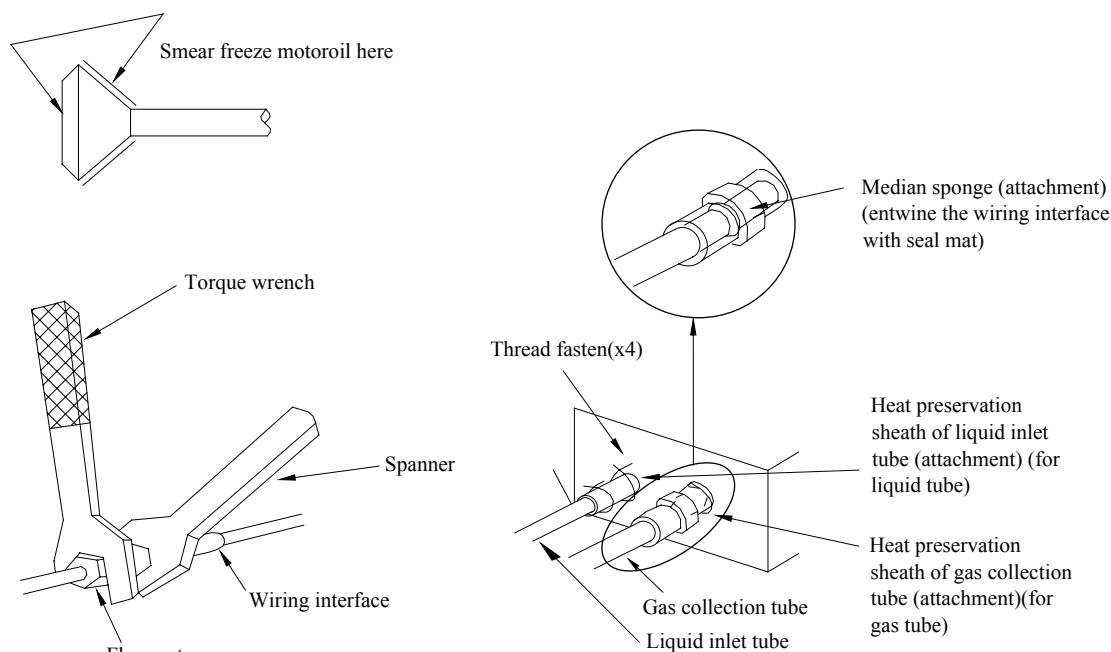


Fig.3.1.4

Form 1: The tightening torque needed for tightening nut

Diameter(Inch)	Surface thickness(mm)	Tightening torque (N.m)
Φ1/4"	≥ 0.5	15-30 (N·m)
Φ3/8"	≥ 0.71	30-40 (N·m)
Φ1/2"	≥ 1	45-50 (N·m)
Φ5/8"	≥ 1	60-65 (N·m)
Φ3/4"	≥ 1	70-75 (N·m)

• Drainage hose

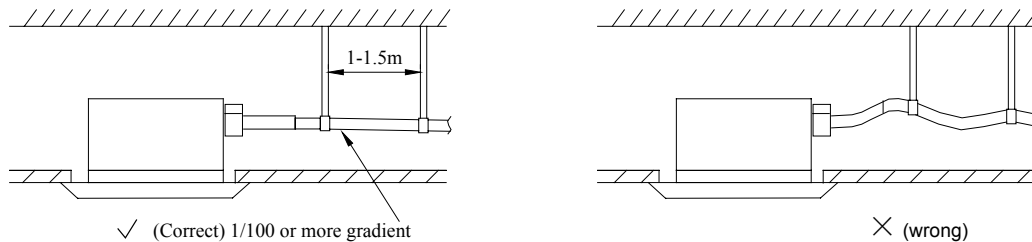
(1) Install the drain hose

◆ The diameter of the drain hose should be equal or bigger than the connection pipe's. (The diameter of polythene pipe: Outer diameter 25mm Surface thickness $\geq 1.5\text{mm}$)

◆ Drain hose should be short and drooping gradient should at less 1/100 to prevent the formation of air bubble.

◆ If drain hose cannot has enough drooping gradient, drain raising pipe should be added.

◆ To prevent bent of the drain hose, the distance between hoisting stand should is 1 to 1.5m.



◆ Use the drain hose and clamp attached. Insert the drain hose to the drain vent, and then tighten the clamp.

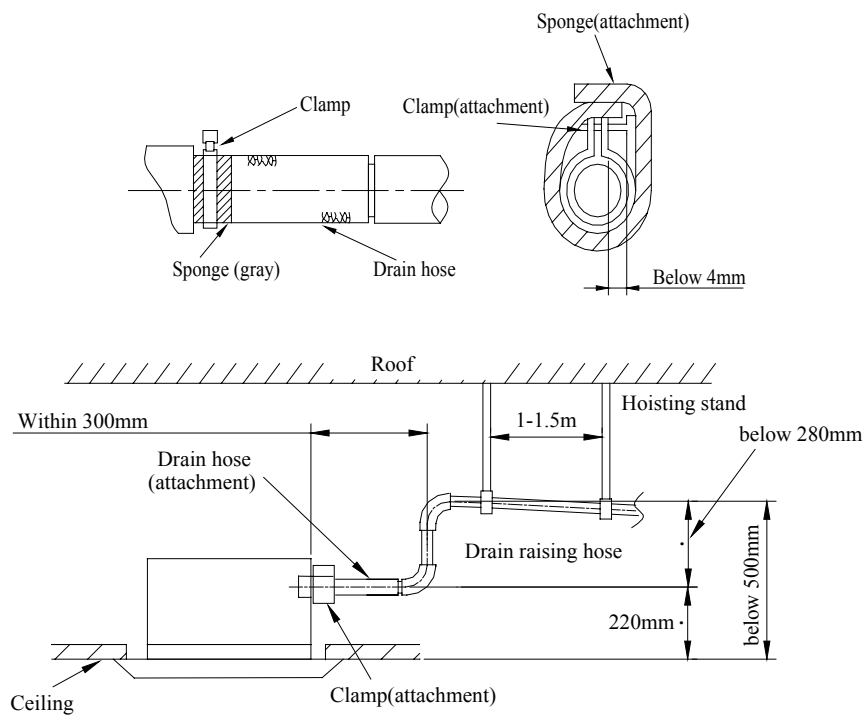
◆ Entwine the big sponge on the clamp of drain hose to insulate heat.

◆ Heat insulation should be done to indoor drain hose.

Drain stepup pipe note

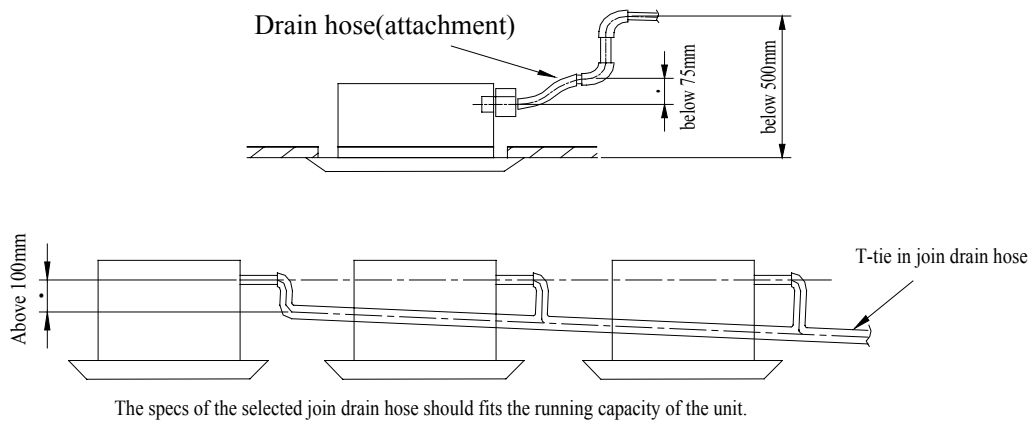
◆ The install height of the drain raising pipe should less than 280mm.

◆ The drain raising pipe should form a right angle with the unit, and distance to unit should not beyond 300mm.



Instruction

- ◆ The slant gradient of the attached drain hose should be within 75mm so that the drain hole doesn't have to endure the unnecessary outside force.
- ◆ Please install the drain hose according to the following process if several drain hoses join together.

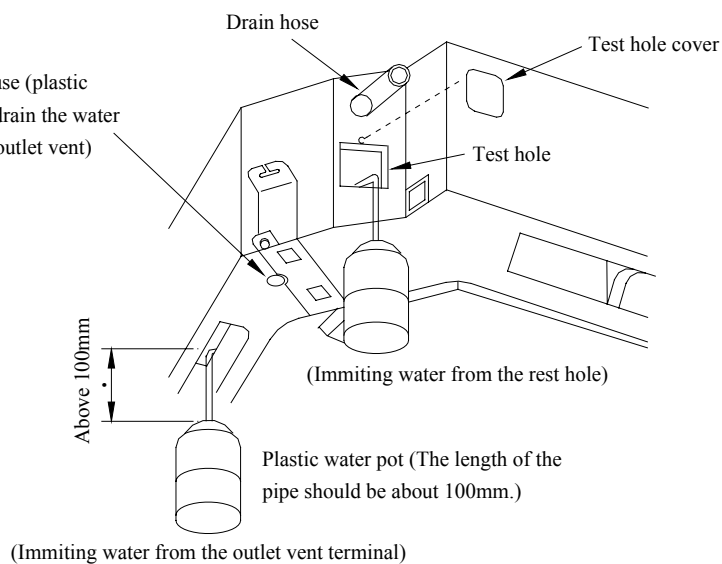


(2) Check the smoothness of drain after installation.

- ◆ Check the drain state by immitting 600cc water slowly from the outlet vent or test hole.
- ◆ Check the drain in the state of refrigerating after installation of the electric circuit.

[Way of immiting]

Drain vent for repair use (plastic stopper is included) (drain the water in waterspout by this outlet vent)



3.2 Air Duct Type

NOTE: The picture of the units is only for reference, everything goes by with the real object.

3.2.1 Selection of installation site

The selection of the installation place of the air conditioner unit

The installation must accord with the national and local safe criterion.

Since the quality of installation would affect the operation directly, user should contact the seller and have the conditioner installed and tested by the professional install personnel according to the install instruction instead of install by himself/herself.

Only connect the power after all the installation works are finished.

The selection of the installation place of the indoor unit

- ◆ Prevent direct sun burn.
- ◆ Make sure that the top steeve, ceiling, and the structure of the construction etc. is strong enough to bear the weight of the unit.
- ◆ The drainage pipe is easy to drain.
- ◆ The air flow is not blocked at the outlet and intake vents.
- ◆ The connecting pipe indoor and outdoor can by lead to outside conveniently.
- ◆ The unit cannot be installed in the place where stored the flammability, easy exploded thing or the place where would have leakage of flammability and exploded gas.
- ◆ The unit cannot be installed in the place where has the corrupt gas and serious dust, saline fog, lampblack and huge humidity.

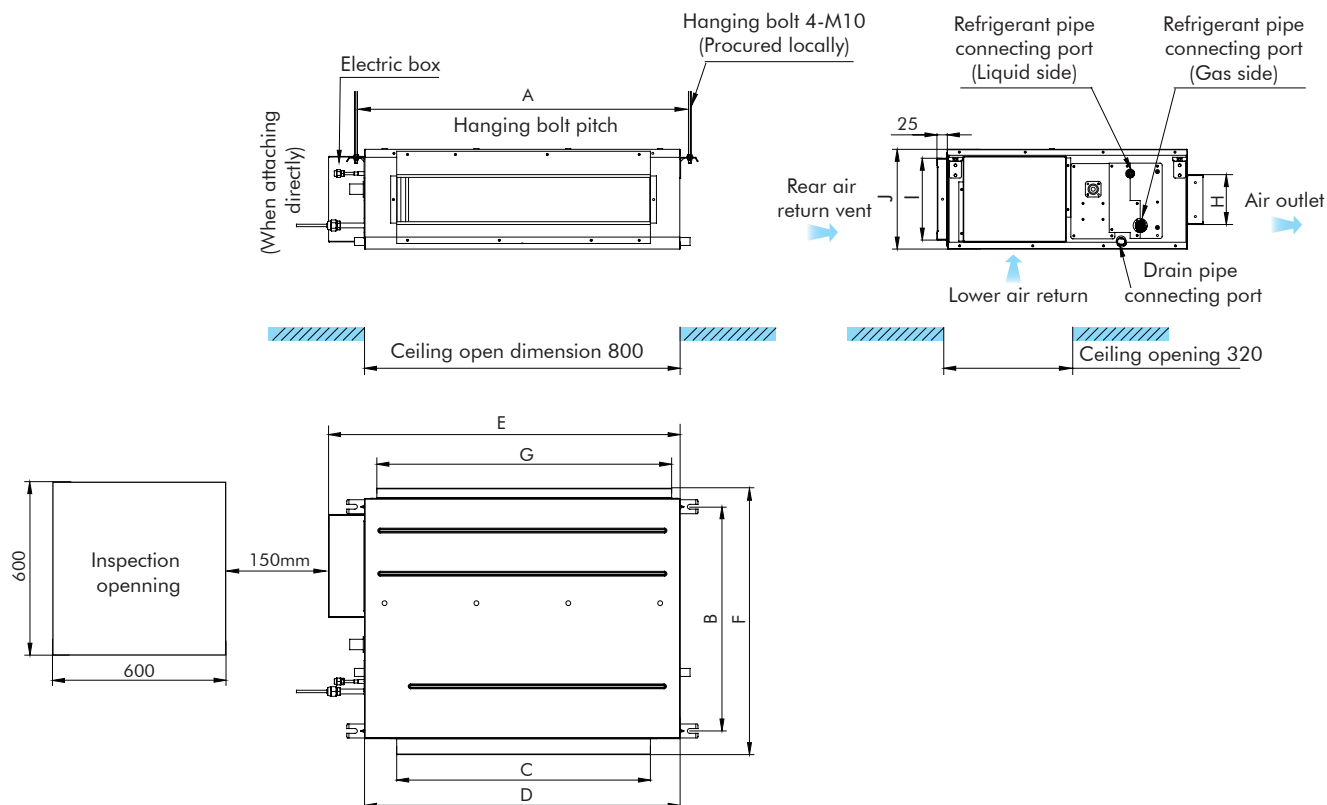


Note!

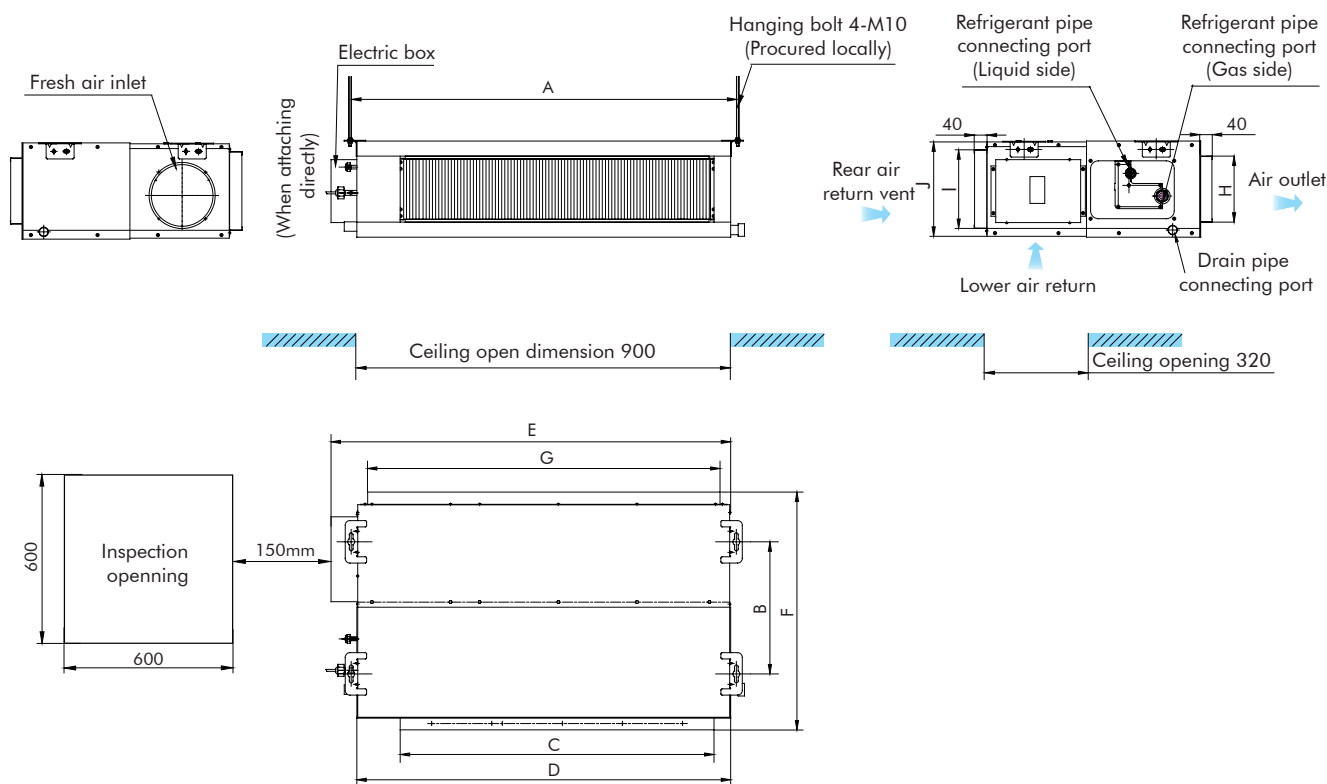
The air conditioner unit installed in the following place may have malfunction, if the malfunction cannot prevent, please contact the Nominated Repair Center Of Gree Electric Appliances, Inc. Of Zhuhai.

- 1) the place with greasy all around;
- 2) the seashore place with salinity and alkali;
- 3) the place with vulcanized gas(such as vulcanized hot spring);
- 4) the place with high frequency equipment (such as wireless equipment, electric welding machine and medical treatment equipment);
- 5) the place with special environment.

The following figure is applicable to the indoor units of GMV-R22P/NaB-D, GMV-R28P/NaB-D, GMV-R36P/NaB-D.



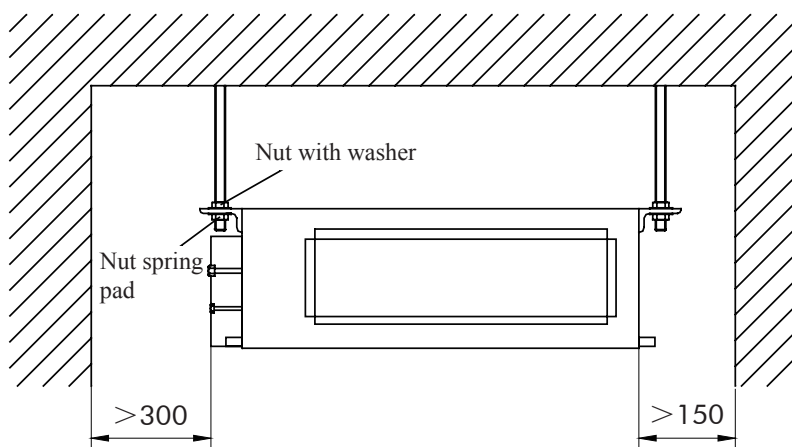
The following figure is applicable to the indoor units of GMVR56P/NaB-D, GMV-R71P/NaB-D, GMV-R90P/NaB-D, GMV-R112P/NaB-D, GMV-R140P/NaB-D.



Unit:mm

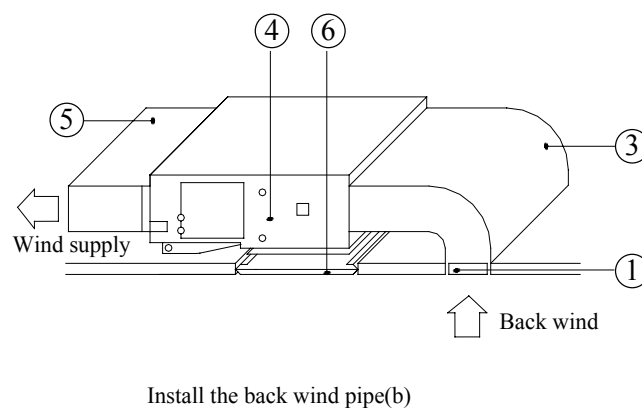
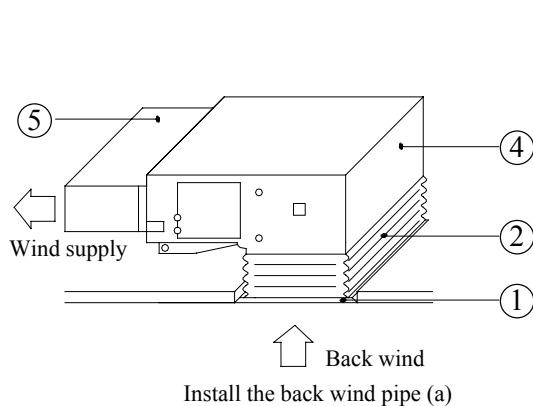
Model	A	B	C	D	E	F	G	H	I	J
GMV-R22P/NaB-D GMV-R28P/NaB-D GMV-R36P/NaB-D	840	561	635	790	880	665	738	125	203	250
GMV-R56P/NaB-D GMV-R71P/NaB-D	1114	420	918	1074	1159	756	1010	207	250	300
GMV-R90P/NaB-D GMV-R112P/NaB-D GMV-R140P/NaB-D	1382	420	1155	1340	1425	738	1280	207	250	300

3.2.2 Clearance data



3.2.3 Installation demonstration

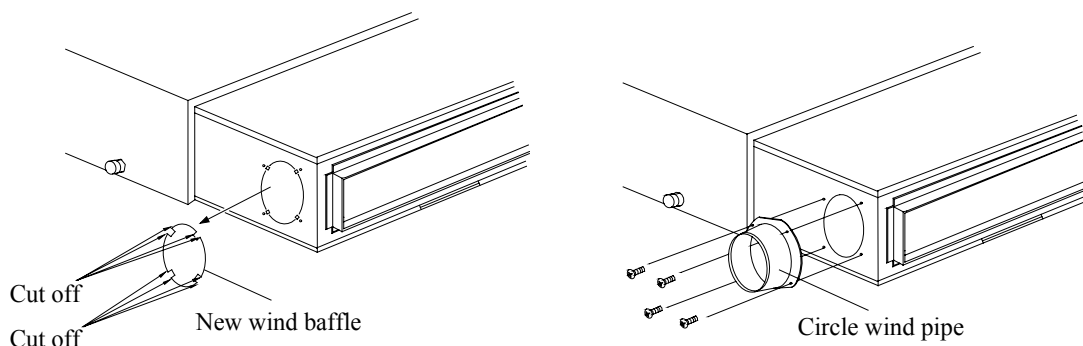
1) Selection of style of return air



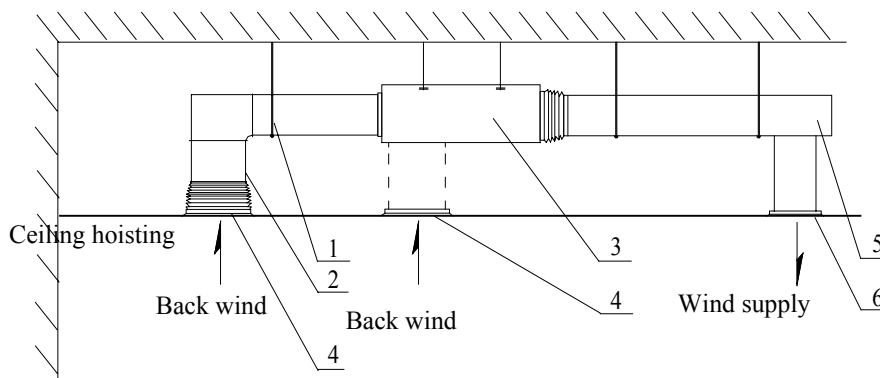
No.	Name	No.	Name
1	Back wind vent (with filter)	4	Indoor unit
2	Canvas wind pipe	5	Wind supply pipe
3	Back wind pipe	6	Test grill

2) Installation of fresh air duct

- ①. When new wind pipe is need to be connected, cut the new wind baffle as shown in fig.8. Plug up the gap of new wind baffle by sponge if new wind pipe is not used.
- ②. Install the circle flange so that the new wind pipe can be connected as fig.9.
- ③. Well sealed and heat preservation should be done for both wind pipe and circle flange pipe.
- ④. New wind should be the air after filtrate treatment.



3) Installation of air supply duct



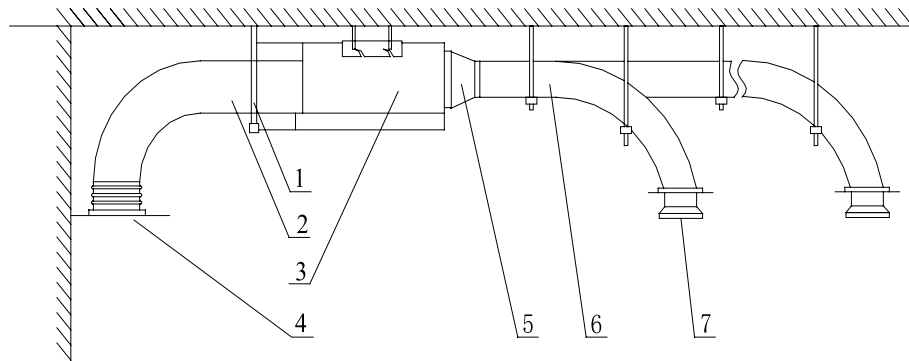
No.	1	2	3	4	5	6
Name	Hoisting	Back wind pipe	Ducted type indoor unit	Back wind vent	Wind supply bent	Wind outlet

Note:

Fig.6 only shows the install of rear back wind vent, button back wind vent can also been installed according to the actual install need. The method of install is similar to the rear back wind vent's. The wind supply pipe, which is rectangle or circle and connect with the wind vent of the indoor unit, should at least keep one open. The circle wind pipe type should adopt circle preservation pipe to transmit cool (heat) wind to room. The circle wind pipe should add a transitional pipe, which size should match the size of wind supply vent of the unit. After connecting the transitional pipe, install the circle wind outlet vent connection pipe, whose longest length to every individual wind outlet vent should not over 10m. Ducted type indoor unit model 70 can share 3 transitional pipe, while model 100,120 can share 4. The transitional pipe, whose straight length is 200, and circle wind outlet connection pipe, whose diameter is 200, produced by our company, can be ordered separately as standard fittings. Model 50 and the model below it do not share circle wind vent. The following is the diagram for install circle wind pipe.

⚠ Note:

- ①. The longest length of wind pipe means the general length of the wing supply pipe to the farthest wind supply vent plus the general length of back wind pipe to the relative farthest back wind vent.
- ②. To the unit with auxiliary heater, if the circle wind pipe is need to connected, the straight length of transinational wind pipe should not shorter than 200mm.



Number	1	2	3	4	5	6	7
Name	Screw	Return air duct	Ducted type indoor unit	Return air inlet	Transitional air duct	Air supply pipe	Air outlet pipe

4) Setting hole for maintenance

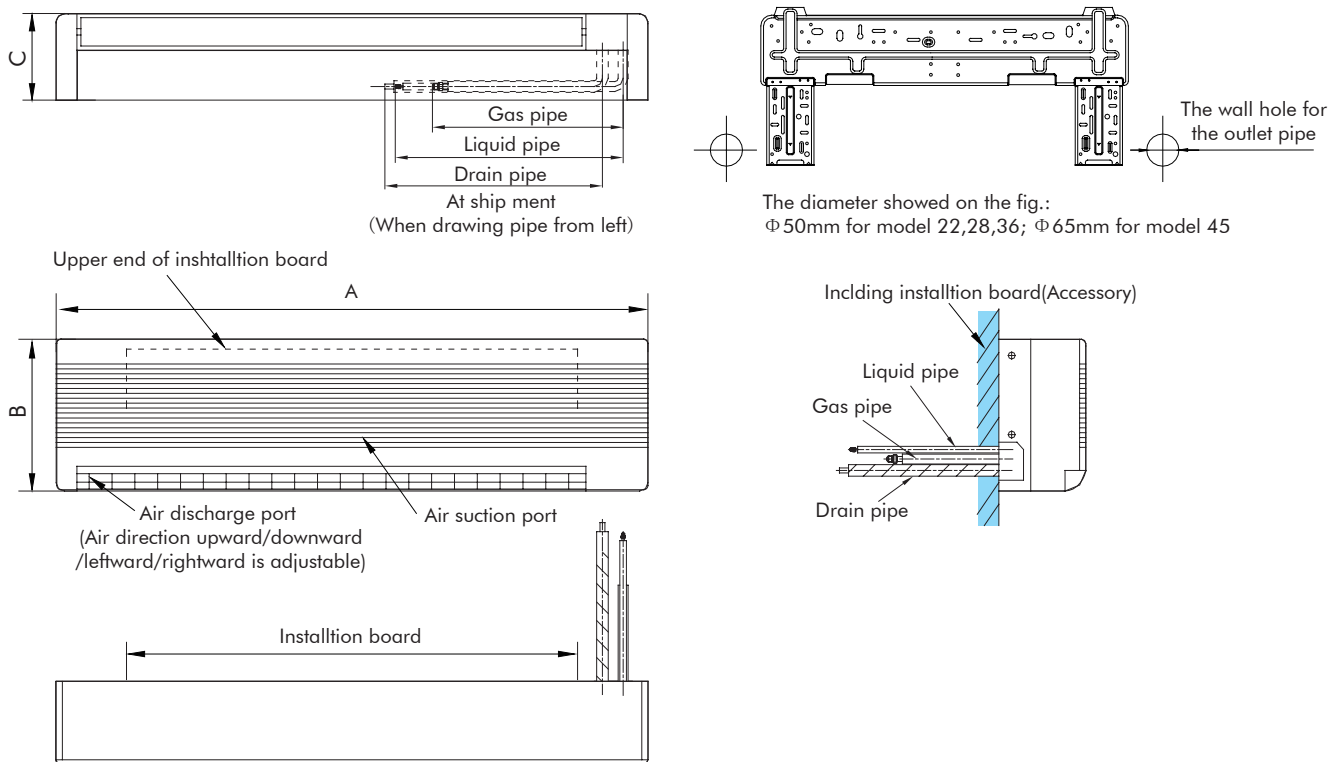
After installation of hidden duct-type unit, manhole must be provided in ceiling on the electric box side of the indoor unit. In respect to the manhole, the following points must be taken into consideration:

- ◆ For access, the manhole size shall be larger than 500mm×500mm.
- ◆ The manhole must be at a possible easily accessible for repair of electric elements and pipe.
- ◆ The air inlet may also be used as manhole for repair of motor.

3.3 Wall Mounted Type

NOTE: The picture of the units is only for reference, everything goes by with the real object.

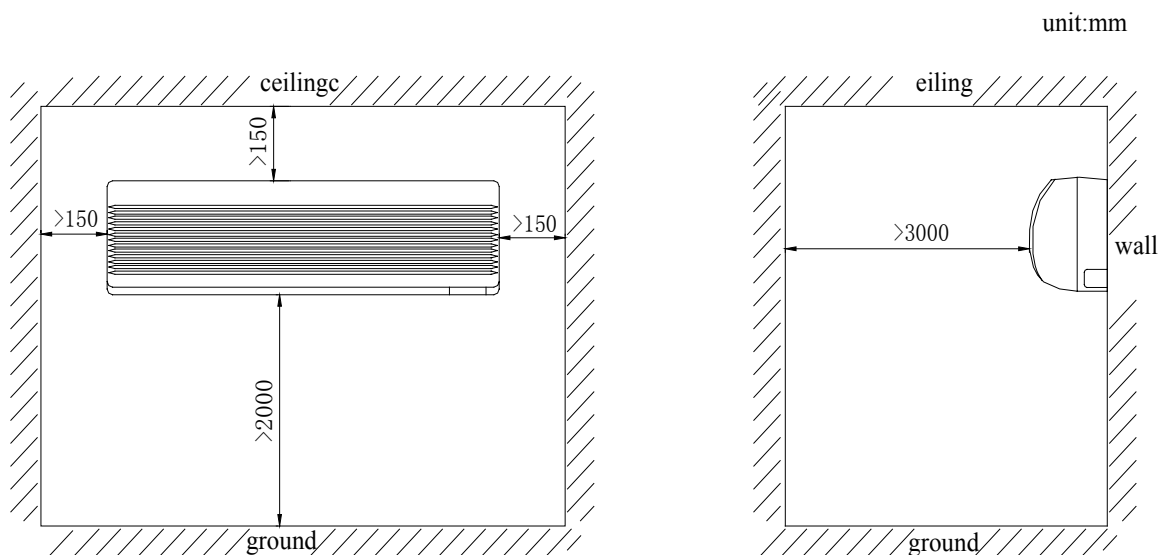
3.3.1 Dimensions Data



Remark :The appearance will be different according to the models.

Model	A	B	C
GMV-R22G/NaG-D,GMV-R28G/NaG-D	843	275	180
GMV-R36G/NaG-D,GMV-R45G/NaG-D GMV-R50G/NaG-D	940	298	200
GMV-R56G/NaG-D,GMV-R63G/NaG-D GMV-R71G/NaG-D	1008	319	221

3.3.2 Clearance Data



Important Notice:

- ① . The unit must be installed by the professional personnel according to this install instruction to ensure the well use.
- ② . Please contact the local Gree special nominated repair department before installation. Any malfunction caused by the unit that is installed by the department that is not special nominated by Gree would not deal with on time by the inconvenience of the business contact.
- ③ . It should be guide under the professional personnel when the air conditioner unit is moved to other place.

3.3.3 Installation demonstration

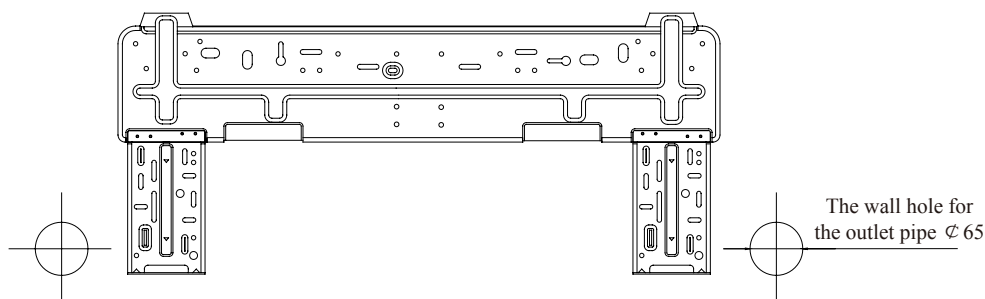


Fig3.3.3.1

- 1) Find the horizontal position by seton method; since the drainage pipe is on the left side, adjust the rear panel to make its left side a little bit lower.
- 2) Fix the rear panel on the wall by bolt.
- 3) After installing the rear panel, pull it by hand to check if it is firm enough. The hang panel should support the weight of an adult (60KG), and the weight shared by every bolt for steady should be fairly even.
- 4) The diameter showed on the fig.1 is 65mm.

- **Installation the Wall Mounted Type indoor unit**

- ◆ Make the piping hole (Φ65mm) in the wall at a slight downward slant to the outdoor side. The center of the hole should be determined refer to Fig.3.3.3.1

- ◆ Insert the piping-hole sleeve into the hole to prevent the connected piping and wiring from being damaged when passing through the hole.

- **Install the drainage pipe**

- ◆ For well draining, the drain hose should be placed at a downward slant.

- ◆ Do not wrench or bend the drain hose or flood its end by water. (Fig .4.3.3.2)

- ◆ Wrap heat resistant material when connect the longer drainage tube though indoor.

Fig .3.3.3.2

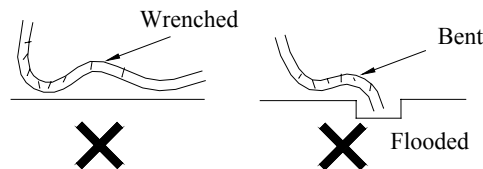


Fig .3.3.3.2

- **Install the connection pipes**

Connect the connect pipe with the two relative leading pipe, tie the nut on tie –in of the connect pipe tightly.



Note:

- ① . Be careful in bending the connection pipes, or you will damage the pipes.
- ② . If the tightening torque is too great in tightening the flare nut, leakage will happen.

3.4 Floor Ceiling Type

3.4.1 Selection of installation site

◆ Selection of Installation Location for Air Conditioner Unit

- The installation of air conditioner unit must be in accordance with national and local safety codes.
- Installation quality will directly affect the normal use of air conditioner unit. The user is prohibited from installation by himself. Please contact your dealer after buying this machine. Professional installation workers will provide installation and test services according to installation manual.
- Do not connect to power until all installation work is completed.

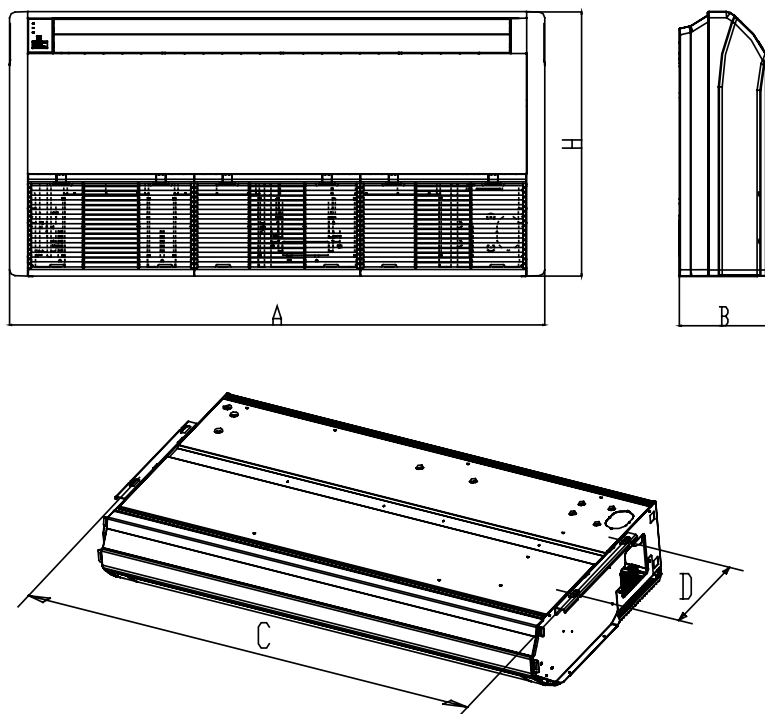
◆ Selection of Installation Location

- Such a place where cool air can be distributed throughout the room.
- Such a place where is condensation water is easily drained out.
- Such a place that can handle the weight of indoor unit.
- Such a place, which has easy access for maintenance.
- Such a place where is permitting easy connection with the outdoor unit.
- Such a place where is 1m or more away from other electric appliances such as television, audio device, etc.
- Avoid a location where there is heat source, high humidity or inflammable gas.
- Do not use the unit in the immediate surroundings of a laundry, a bath, a shower or a swimming pool.
- Be sure that the installation conforms to the installation dimension diagram.

◆ Caution for installation where air conditioner trouble is likely to occur

- Where there is too much of oil.
- Where it is acid base area.
- Where there is irregular electrical supply.

3.4.2 Dimensions Data



Model	Installation dimensions		Outline dimensions		
	C	D	A	H	B
GMV-R28Zd/NaB-D	1158	280	1220	700	225
GMV-R36Zd/NaB-D	1158	280	1220	700	225
GMV-R50Zd/NaB-D	1158	280	1220	700	225
GMV-R71Zd/NaB-D	1354	280	1420	700	245
GMV-R90Zd/NaB-D	1354	280	1420	700	245
GMV-R112Zd/NaB-D	1634	280	1700	700	245
GMV-R140Zd/NaB-D	1634	280	1700	700	245

3.4.3 Installation space requirements

The space around the unit is adequate for ventilation (Refer to Fig.1)

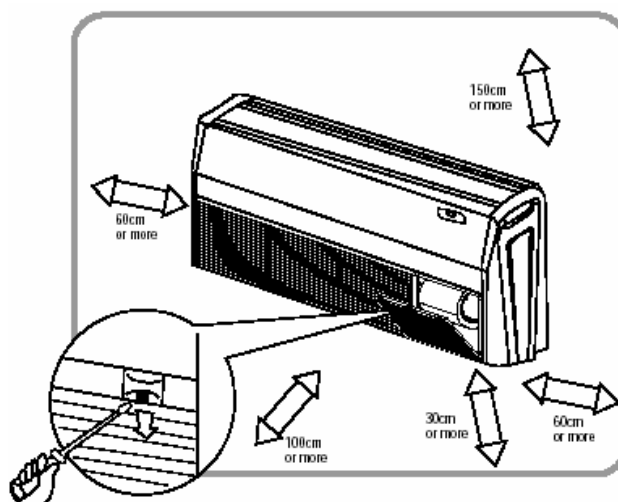


Fig.1

3.4.4 Installation demonstration

- ◆ There are 2 styles of installation

Ceiling type

Floor type

- ◆ Each type is similar to the other as follows:

(1) Determine the mounting position on ceiling or wall by using paper pattern to indicate indoor frame. Mark the pattern and pull out the paper pattern. (Refer to Fig.2)

(2) Remove the return grill, the side panel and the hanger bracket from the indoor unit as per procedure bellow.

Press the fixing knob of the air inlet grilles, the grilles will be opened wider and then pull them out from the indoor.

Remove the side panel fixing screw and pull to the front direction (arrow direction) to remove. Side panel fixing screw (Refer to Fig.3).

Loosen two hanger bracket setting bolts (M8) on earth side for less than 10mm. Remove two hanger bracket fixing bolts (M6) on the rear side. Detach the hanger bracket by pulling it backward (Refer to Fig.5).

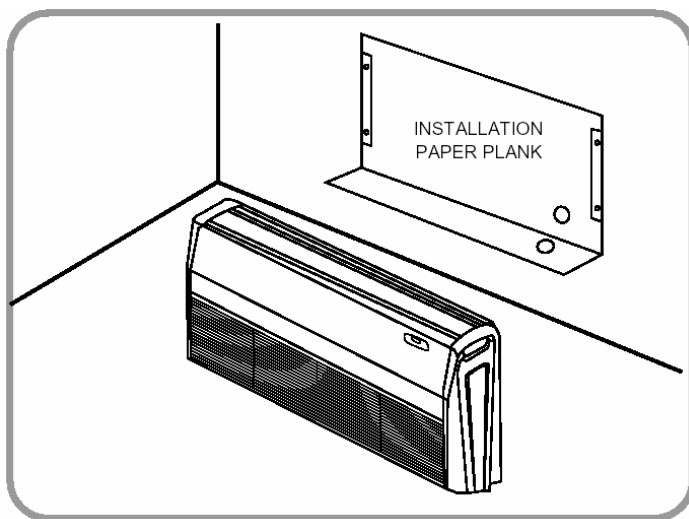


Fig.2

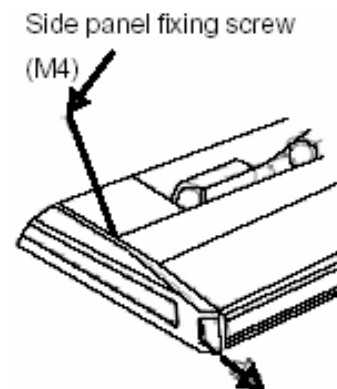


Fig.3

- (3) Set the suspension bolt. (Use W3/8 or M10 size suspension bolts)

Adjust the distance from the unit to the ceiling slab beforehand (Refer to Fig.4)

- (4) Fix the hanger bracket to the suspension bolt.

Warning!

Make sure that extended suspension bolt from the ceiling stays inside the arrowed position. Readjust the hanger bracket when it is outside the arrowed position. (Refer to Fig.6)

Suspension bolt stays inside the cap of indoor unit. Never remove the cap.

Lift the unit and slide forward unit the dent. (Refer to Fig.7)

- (5) Screw tightly both hanger bracket-setting bolts (M8). (Refer to Fig.5)
 (6) Screw tightly both hanger bracket-fixing bolts (M6) to prevent the movement of the indoor unit. (Refer to Fig.5)
 (7) Adjust the height so that rear side of the drainpipe

Caution!

Adjust the height by turning the nut with a spanner.

Insert the spanner from the hanger bracket opening. (Refer to Fig.8)

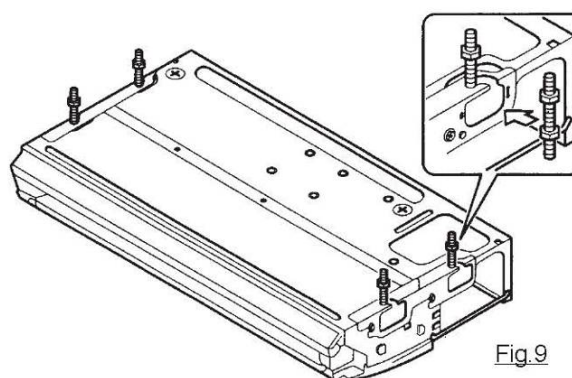
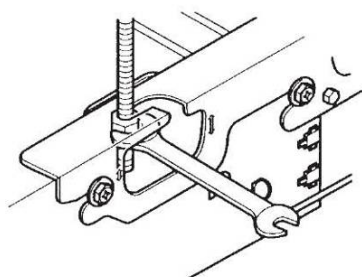
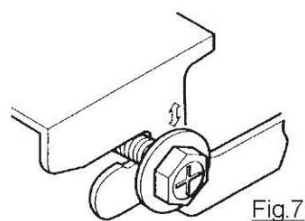
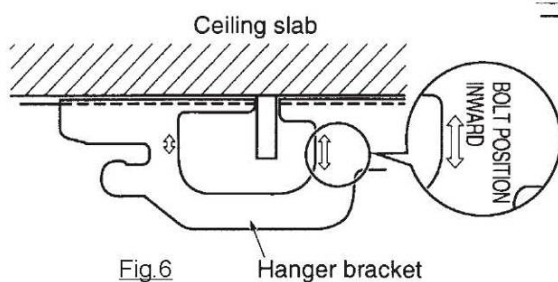
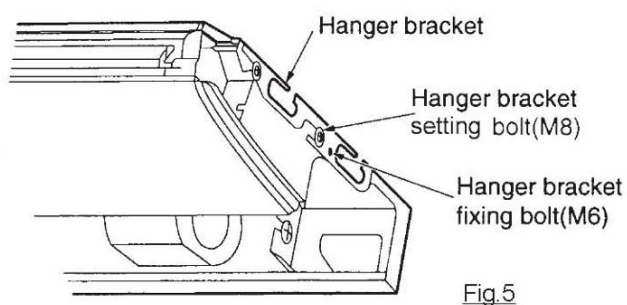
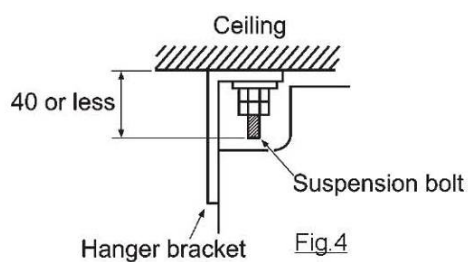
◆ In case of hanging

It is possible to install using inward facing hanger brackets by not removing the brackets from the indoor unit. (Refer to Fig.9)

Be sure to use only the specified accessories and parts for installation work.

It is possible to install using inward facing hanger brackets by not removing the brackets from the indoor unit. (Refer to Fig.9)

Be sure to use only the specified accessories and parts for installation work.

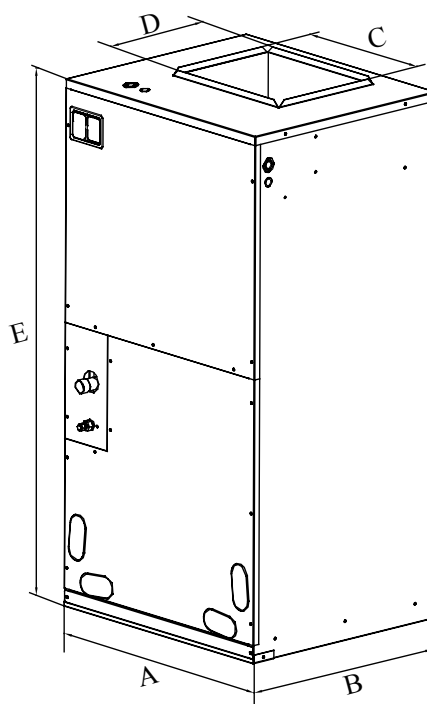


3.5 Air Handler Type

3.5.1 Installation Site

- ◆ A place where cool air can be distributed throughout the room.
- ◆ A place where condensation water is easily drained out.
- ◆ A place that can bear the weight of indoor unit.
- ◆ A place which is easy for maintenance.
- ◆ A place where easy connection with the outdoor unit is available.
- ◆ A place where is 1m or more away from other electric appliances such as television, audio device, etc.
- ◆ Avoid a location where there is heat source, high humidity or inflammable gas.
- ◆ Do not place the unit near a laundry, a bath, a shower or a swimming pool.
- ◆ Be sure that the installation conforms to the installation dimension diagram.
- ◆ The space around the unit is adequate for ventilation

3.5.2 Dimension Data



Unit:mm

MODEL	DIMENSION				
	A	B	C	D	E
GMV-R71A/Na-D	533	541	270	284	1105
GMV-R100A/Na-D	533	541	305	284	1254
GMV-R140A/Na-D	622	541	349	284	1254

3.2.2 Installation the Air Handler

When installing this air handler, focus on consideration to minimize the length of refrigerant pipe. Do not install the air handler in a location either above or below the condenser that violates the instructions provided with the condenser. The clearance form a combustibile surface to the unit is "0". However, service clearance is to take precedence. Allow a minimum of 24" in front of the unit for service clearance. When installing in an area directly over a finished ceiling (such as an attic), an emergency drain pan is required directly under the unit. See local and state codes for requirements. When installing this unit in an area that may become wet, elevate the unit with a sturdy, non-porous material. In installations that may lead to physical damage (i.e. a garage) it is advised to install a protective barrier to prevent such damage.

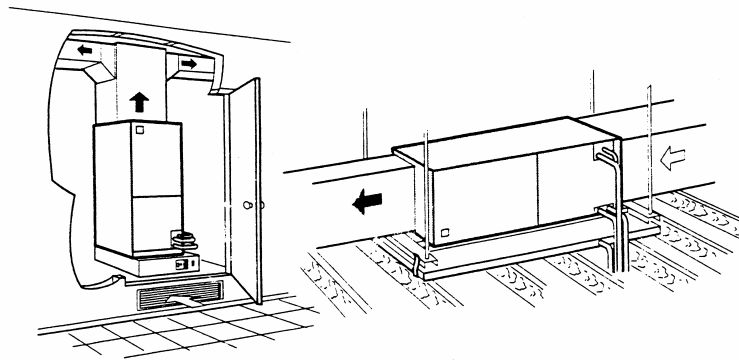


Fig. 3.2.2 Installation Diagram

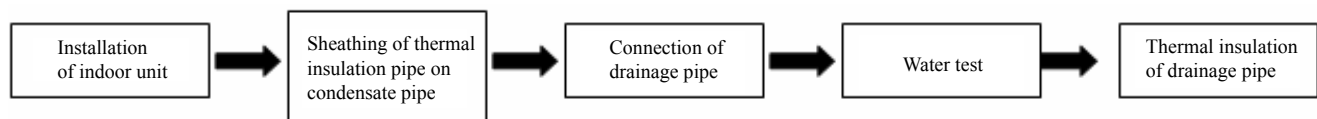
4 INSTALLATION OF CONDENSATE PIPE

4.1 Material Quality Requirements for Condensate Pipe

Generally, the condensate pipe shall be water supply U-PVC pipe, adhered by using special glue. The other materials available include: PP-R pipe, PP-C pipe and hot-dipped galvanized steel pipe. It is not allowed to use aluminum plastic composite pipe.

4.2 Key Points for Condensate Pipe Installation

4.2.1 Work Order



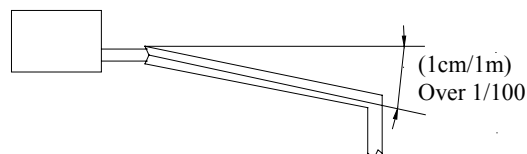
4.2.2 Determine the direction and elevation of condensate pipe before installation. To ensure the gradient smooth and straight, avoid intersecting with other pipelines. The height of the clamp fixing the pipe hanger frame shall be adjustable and fixed from the outer of thermal insulation.

4.2.3 Distance between hanger frames:

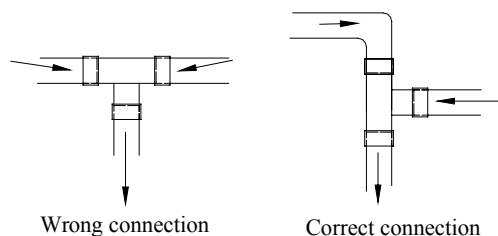
Outer diameter of water pipe (mm)	$\phi \leq 25$	$32 > \phi \geq 25$	$\phi \geq 32$
Spacing between horizontal pipes (mm)	800	1000	1500
Spacing between standpipes (mm)	1500		2000

Each standpipe shall have two hanger frames at least.

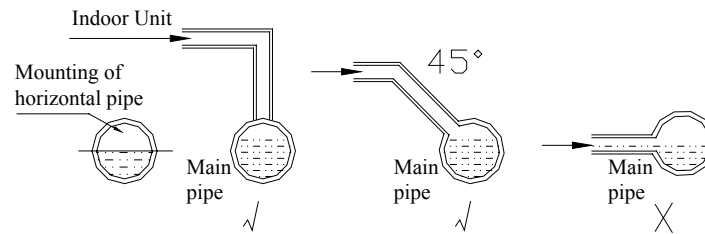
4.2.4 The gradient of condensate pipe shall be over 1% and the gradient of main pipe shall not be less than 0.3%, while there shall be no overhanging slope.



4.2.5 When connecting the 3-way section of condensate pipe, the 2-way straight section on 3-way pipe shall be on the same gradient. The two ends of 2-way section shall not have different gradient. See the schematics below:



4.2.6 Confluence toward the horizontal pipe shall be best from the upper. Back flow is easy to occur if from the lengthwise direction.



4.2.7 Do not tie the condensate pipe and refrigerant pipe together.

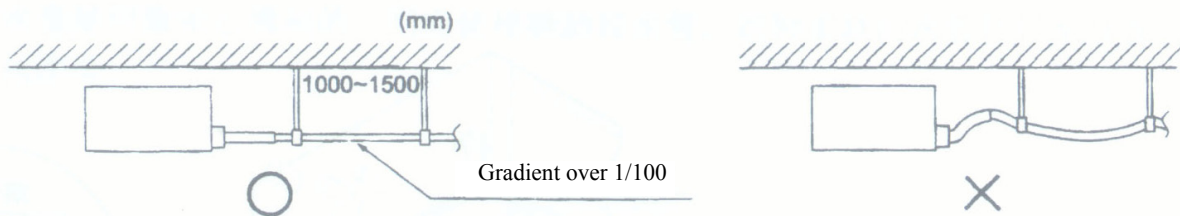
4.2.8 To ensure smooth drainage of condensate, a vent hole shall be set at the highest point of drainage pipe.

4.2.9 Carry out water flow test and full water test after the pipe connection is completed. On one hand, check if the drainage is smooth; on another hand, check the piping system for any leakage.

4.2.10 Steel sheath shall be provided to the pipe crossing the wall or slab. The pipe joint shall not be positioned within the sheath. The steel sheath shall be flush with the wall surface or slab base, but 20mm higher than the slab base. The sheath shall not affect the pipe gradient. The clearance between pipe and sheath shall be blocked by using flexible inflammable materials. The sheath shall not be used as the supporting point of the pipe.

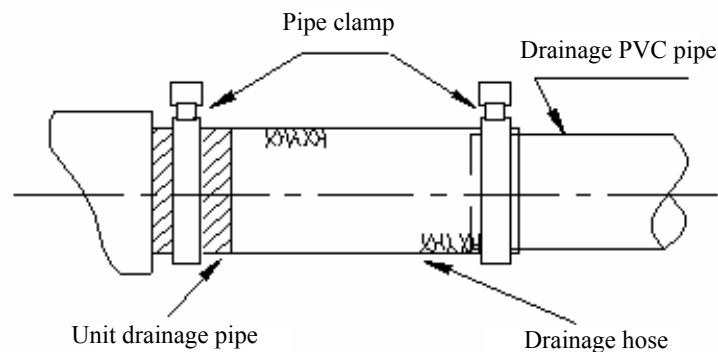
4.2.11 The joint of thermal insulation materials must be adhered by using special glue and then wrapped with plastic tape having a width not less than 5cm to avoid condensing.

4.2.12 Ensure a gradient over 1% when connecting the drainage pipe to the indoor unit.

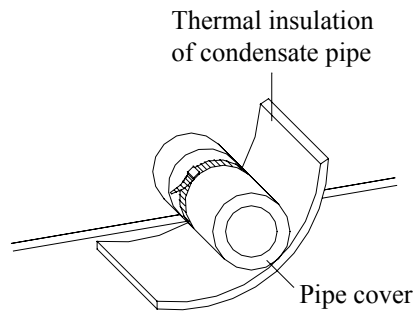


4.2.13 When connecting the drainage pipe to the indoor unit, please fix with the included pipe clamp and do not use glue water, thus to ensure easy repair.

4.2.14 Installation requirements for auxiliary drainage pipe

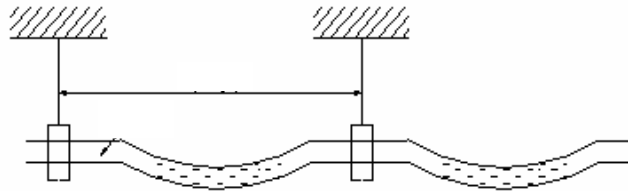


The auxiliary drainage pipe must be thermally insulated:

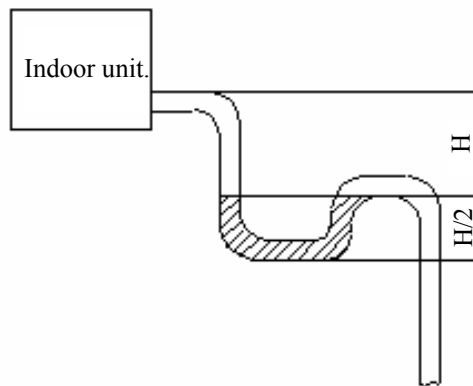


4.2.15 The long drainage pipe may be fixed by using hanger bolts, thus to ensure a gradient of 1/100 (PVC cannot be bent).

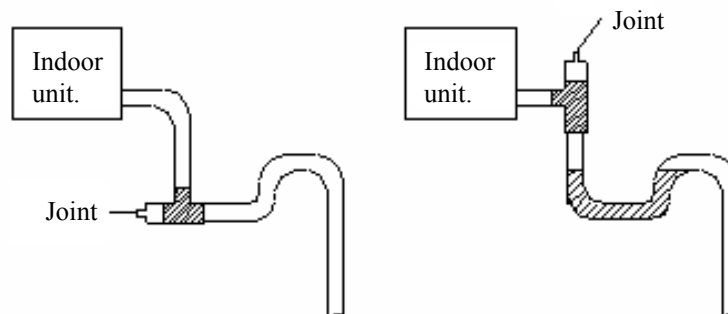
The spacing between the supports of horizontal pipe is 0.8-1.0m. Twisting will be caused and thus air bag will be formed if the spacing is too high. Once the air bag is formed, the pump can only compress the air bag no matter how forcible it pushes, but there is no flowing water, thus resulting in abnormal water level. This will cause flooding of the ceiling.



4.2.16 If the air flow of indoor unit is high, this might cause negative pressure and result in return suction of outdoor air. Therefore, U-type water trap shall be designed on the drainage side of each indoor unit.



- ◆ Install water trap as shown below;
- ◆ Install one water trap for each unit.
- ◆ Installation of water trap shall consider easy cleaning in the future.

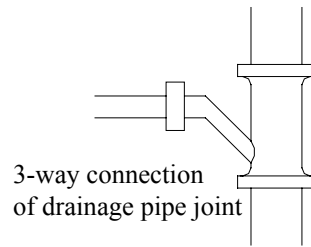


4.2.17 Connection of drainage branch pipe to the standpipe or horizontal pipe of drainage main pipe.

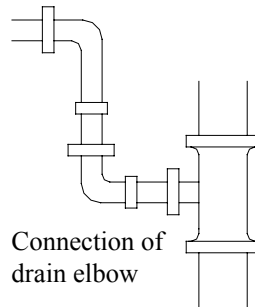
The horizontal pipe cannot be connected to the vertical pipe at a same height. It can be connected in a manner as

shown below:

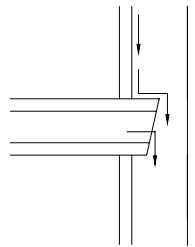
N01: 3-way connection of drainage pipe joint



N02: Connection of drain elbow



N03: Connection of horizontal pipe



Connection of horizontal pipe

Drainage pipe is requisite for air conditioner unit. During cooling, the moisture in the air will condense on the surface of evaporator. Such condensing water must be drained out of the unit. Meanwhile, the drainage pipe has an important role to determine if the air conditioner can plays its full functions.

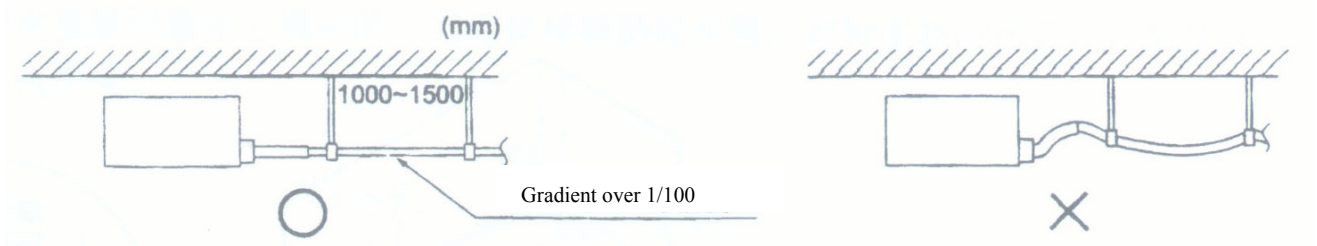
4.2.18 All the condensate pipes must be installed at a distance over 500mm from the electric box of the unit.

4.3 Installation of Drainage Pipe for Different Types of Indoor Unit

4.3.1 Duct-type Indoor Unit (Including General Static Pressure and Low Static Pressure)

a) Installation of drainage pipe

- ◆ The diameter of drainage pipe shall be equal to or higher than the diameter of connection pipe. (PVC pipe: Dimension: Outer diameter 25mm, 32mm)
- ◆ The drainage pipe shall be short and has a down gradient of 1/100 at least, thus to avoid air bag.
- ◆ To ensure that the drainage hose will not be bent and has enough gradient, a distance of 1 ~ 1.5m shall be kept between the hanger frames.



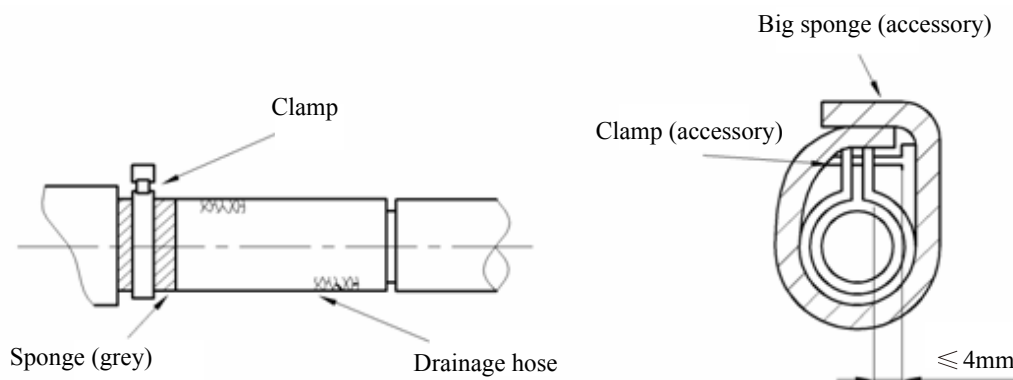
- ◆ Use drainage pipe and clamp.

Insert the drainage hose to the root. From the middle of white tape, tighten the clamp until the tightening distance to

the screw head is shorter than 4mm.

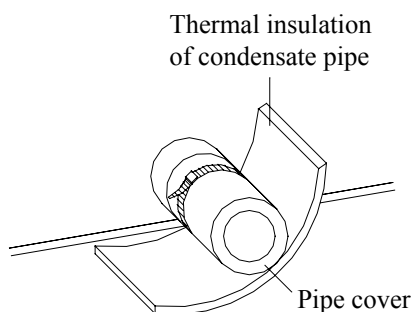
A) For thermal isolation, use sealing tape to wrap the drainage pipe and clamp.

B) The indoor drainage hose shall be thermally insulated.



C) To prevent foreign articles from entering the pipe, please minimize the bend of pipeline, thus to ensure cleanliness of the drainage elbow.

D) The drainage pipe must be wrapped with thermal insulation tube, thus to avoid condensing on the outer surface of drainage pipe. See below for the thickness of thermal insulation tube.



Drainage Pipe (mm) (Outer Dia.)	Thickness of Thermal Insulation Materials (mm)
Φ17	≥ 15
Φ27	≥ 20
≥34.9	≥ 20

Notes:

E) The inclination of drainage hose ① shall be within 75mm, so that the drainage insert will not bear excessive force.

F) To connect the drainage pipes for multiple machines, please use the method of multi-pipe collection, as shown below.

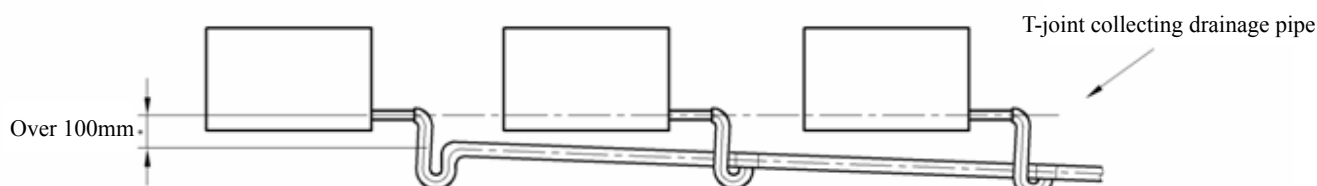


Fig. The specification of collecting drainage pipe shall be suitable to the working capacity of the unit

We may collect the drainage pipes of all the indoor units in one system (An outdoor unit and all the indoor units connected to this outdoor unit are called one system), or collect the drainage pipes of all the indoor units in several systems.

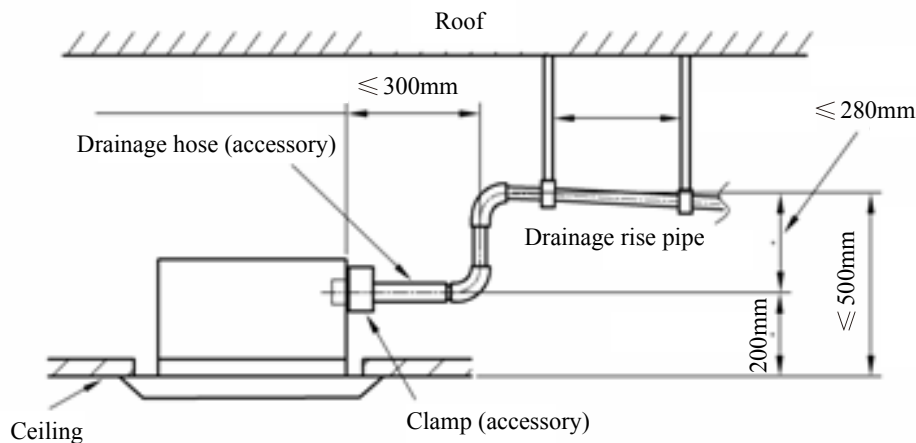
Notes:

The ceiling height must be considered, and a specific gradient shall be ensured along the water flow direction.

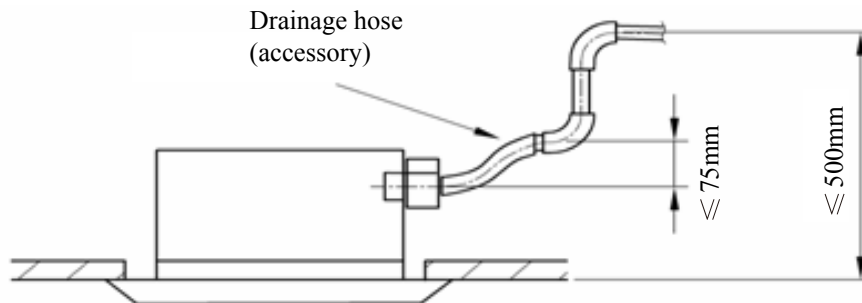
4.3.2 Cassette Type (Four-sided Outlet)

a) Installation of drainage pipe

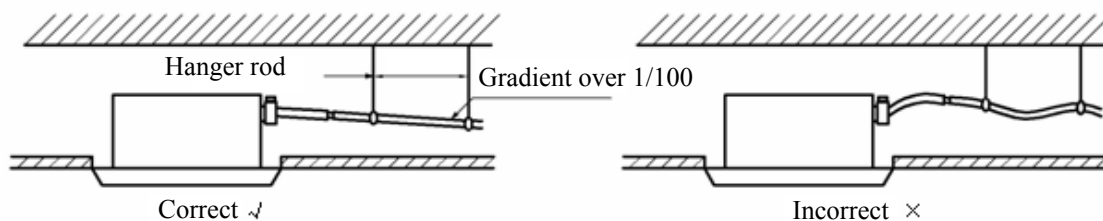
- ◆ The drainage pipe shall be installed to ensure smooth flow of water.
- ◆ The diameter of drainage pipe shall be equal to or higher than the diameter of connection pipe (PVC pipe) (exclusive of the rise section).
- ◆ The drainage pipe shall be short and has a down gradient of 1/100 at least, thus to avoid air bag.
- ◆ If the inclination of the drainage hose is insufficient, drainage rise pipe shall be mounted.
- ◆ The installing height of drainage rise pipe shall be less than 280mm.
- ◆ The drainage rise pipe shall be in right angle to the unit and the distance to the unit shall not exceed 300mm.



- ◆ The inclination of included drainage hose shall be within 75mm, so that the drainage insert will not bear excessive force.

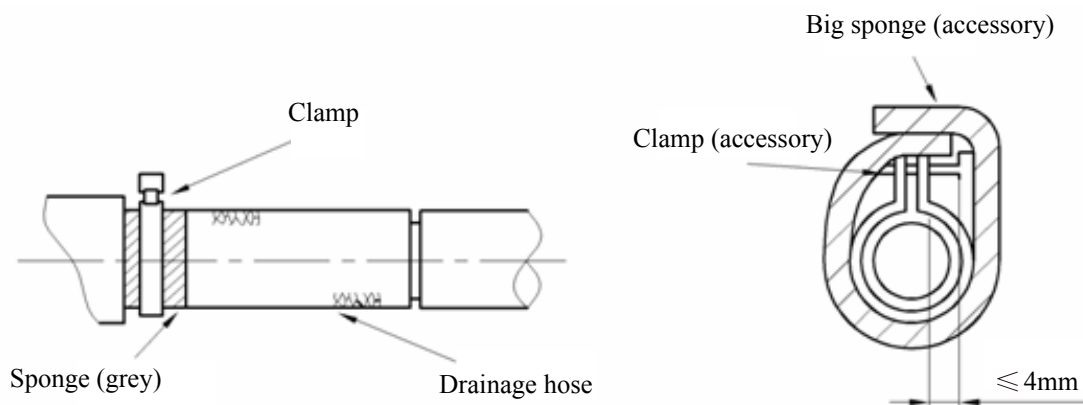


- ◆ To prevent the drainage hose from dropping downward, hanger rods shall be erected every 1.0~1.5m.



- ◆ Use the included drainage hose and clamp. Insert the drainage hose to the drainage port and tighten the clamp.
- ◆ For thermal insulation, wrap the big sponge to the drainage hose clamp.

- ◆ The indoor drainage hose shall be thermally insulated.



- ◆ To connect the drainage pipes for multiple machines, please use the method of multi-pipe collection, as shown below.

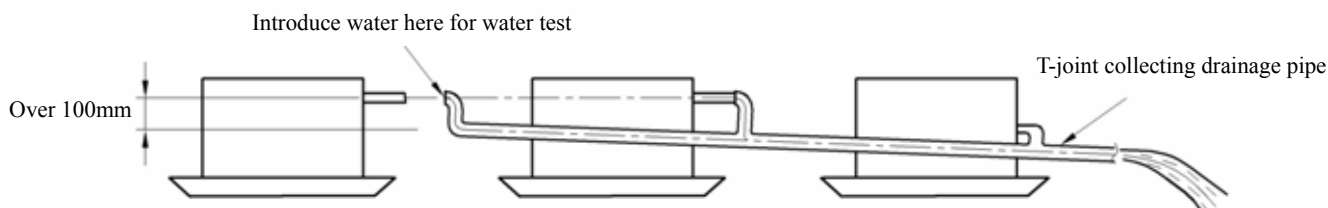


Fig. The specification of collecting drainage pipe shall be suitable to the working capacity of the unit

We may collect the drainage pipes of all the indoor units in one system (An outdoor unit and all the indoor units connected to this outdoor unit are called one system), or collect the drainage pipes of all the indoor units in several systems.

The ceiling height must be considered, and a specific gradient shall be ensured along the water flow direction. The cassette-type indoor unit is provided with water pump, and the maximum lift of its drainage pipe is 280mm.

- ◆ During installation, please take care that:

The diameter of drainage pipe connected to the indoor unit must meet the specifications. The pipe diameter shall not be too small; otherwise the water may overflow.

The main drainage pipe depends on the number of indoor units. Generally, it is required to be equal to or higher than $\phi 35\text{mm}$.

The drainage pipe shall be thermally insulated. The thickness of thermal insulation pipe must meet the requirements. The clearance between thermal insulation pipes shall be sealed with adhesive sticker.

Please discharge the water to the ground drain, water closet or any other place easy to drain the water out.

b After installation, check if the drainage is smooth.

4.3.3 Wall-mounted Type

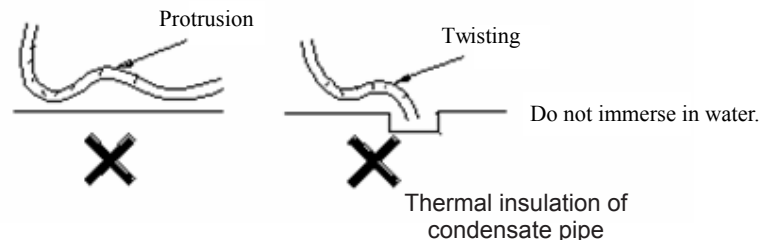
Assemble the drainage pipe as shown below and take measures to prevent condensing. Improper assembly of the drainage pipe may cause leakage, or even expose the furniture to moisture.

a) Assembly of drainage pipe

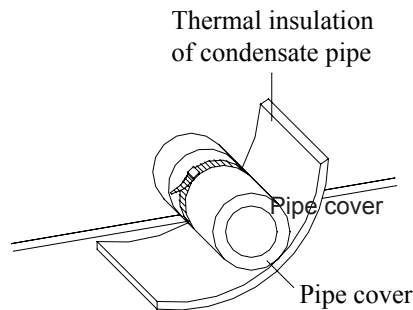
◆ To avoid air in water elbow, the drainage hose shall be kept as short as possible and inclined downward, as shown below.

◆ During connection, please use PVC pipe of equal size higher than this size (Nominal Dia.: 20mm; Outer Dia.: 26mm)

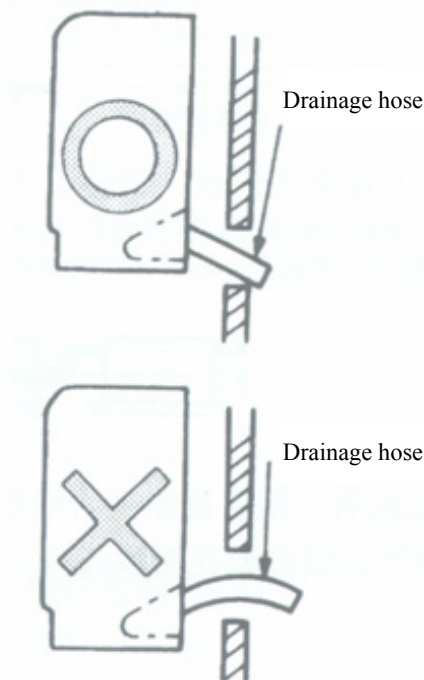
◆ The drainage pipe must be arranged in down inclination along water flow direction, thus to avoid air bubble blocking. Take care not to arrange the pipe in twisting, protrusion or waveform. Do not put the outlet of drainage pipe into water.



◆ The extended section of drainage hose shall be wrapped with thermal insulation sheath when passing the room.



◆ After installation of the drainage pipe, be sure to make water test and check if the water can be drained smoothly.



b) After piping work, check if the draining flow is smooth.

4.4 Test for Condensate Pipe

The water test for condensate pipe includes closed water test and drainage test. The closed water test is focused on checking if the drainage pipe system is well sealed and if there is any leakage. The drainage test is focused on checking if the drainage pipe system can drain water smoothly and thoroughly and ensuring that there is no water deposit (except the specially designed water trap).

After connection of the drainage pipe is completed, firstly carry out closed water test. Seal the outlet of drainage pipe with adhesive tape or plug. Then, fill water into the drainage pipe system from indoor unit side. Stop filling after ensuring that all the drainage pipes are filled with water. After 24 hours, check all the joints of water pipe for any leakage. If any, repair and reinstall. If no leakage, proceed to drainage test.

Remove the adhesive tape or plug from the drainage pipe. Check the water tray and drainage pipe of indoor unit if the drainage is thorough and if there is any water deposit. If any, readjust it. If not, complete the water test and proceed to the thermal insulation on all pipe joints.

4.5 Requirements of Heat preservation

◆ Heat Insulation Materials

The thermal insulation material of obturator foam shall be used. Fireproof level: B1.

The thermal conductivity shall not be higher than $0.035\text{W}/(\text{m}\cdot\text{K})$ when the average temperature is $0\text{ }^{\circ}\text{C}$.

◆ Thickness of thermal insulation layer

The thickness of thermal insulation layer on condensate pipe shall be over 10mm.

◆ The joint of thermal insulation materials must be adhered by using special glue and then wrapped with plastic tape having a width not less than 5cm to avoid condensing.

◆ Thermal insulation is not required for the outdoor section of condensate pipe.

5 ELECTRICAL INSTALLATION

5.1 Precautions for Electrical Installation

◆ The wiring must be in accordance with the local rules.

◆ Rated supply voltage and special circuit for air conditioner must be used.

◆ Do not pull the power cord.

◆ All the electric installations must be carried out by specialist technicians in accordance with the local laws, rules and these instructions.

◆ The diameter of flexible wire should be wide enough. Replace the damaged power cord and connecting wire with special flexible wire.

◆ The earthing shall be reliable and connected to the special earthing device on the construction. The installation must be done by specialist technicians. The leak protection switch and air switch with enough capacity must be installed. The air switch shall have both the magnetic tripping and thermal tripping functions to ensure protection against the short circuit and overload.

● Earthed Requirements

◆ The air conditioner belongs to I type electric appliances. The reliable earthed action is a must.

◆ The yellow and green wire inside the air conditioner is the earthed wire. Do not use it for other purpose or even cut off it. Do not fix it with tapping screw. Otherwise, it may cause electric shock.

◆ The earthed resistance must meet the requirements of national standard GB17790.

◆ There should be reliable earthed terminal for the power supply. Never connect the earth lead to the following articles:

① water pipe; ② gas pipe; ③ drain pipe; ④ unreliable place considered by professionals.

5.2 Dial-up of Unit

The DC inverter GMV unit of Gree is provided with three dial-ups, i.e. address dial-up, capacity dial-up and function dial-up. Adjust the function dial-up to set control, mode and function; Adjust the address dial-up to set the corresponding relationship of indoor unit and wired controller; Adjust the capacity dial-up to set capacity demand of indoor unit.

5.2.1 Function Dial-up

Caution!

Functional dial switch S7 is located on the mainboard of the indoor unit. It is operated when the user need to change the default setting.

Functional dial switch S7			
Dial-up Switch	Functional Description:	Dial-up Setting	
		0 (ON Position)	1
1(S / R)	Setting of memory mode	Standby (S)	Restore (R)
2(L / I)	Setting of control mode	Wired control (L)	Remote control (I)
3(M / S)	Setting of master / slave indoor unit	Master indoor unit (M)	Slave indoor unit (S)
4(I / O)	Setting of ambient temperature acquisition point	Air inlet (I)	Receiver (O)
5(L / H)	Setting of high / low static pressure fan	Low static pressure (L)	High static(H)

Functional description of function dial-up:

Dial-up switch 1 (S/R):

Setting of memory mode, including the standby mode and restoration mode. The standby mode refers to that the previous parameters will be kept but the unit will not run automatically after the power supply is resumed. This setting is factory defaulted (dial-up switch pulled to “ON” position). For example, if the parameters of an indoor unit set before power shutdown are High Fan and 24°C, the unit will be under standby state after the power supply is resumed and after the unit is manually started, the parameters will remain as High Fan and 24°C. The restoration mode refers to that not only the previous parameters will be kept, but also that the unit can start automatically after the power supply is resumed. But if the unit is under STOP state before power shutdown, it will be also under STOP state after the power supply is resumed.

Dial-up switch 2 (L/I):

Setting of control mode, including wired control and remote control. The wired control mode refers to that the indoor unit is controlled from wired controller (hand controller). This setting is factory defaulted (dial-up switch pulled to “ON” position). When the setting is wired control mode, the function dial-up on S7 for “setting of memory mode” and “setting of master / slave indoor unit” will be disabled. These two settings can be done from the wired controller directly. The remote control mode refers to that the indoor unit is controlled from remote controller. When the setting is remote control mode, its function dial-up must be set on S7.

Dial-up switch 3 (M/S):

The setting of master / slave indoor unit refers to the master / slave setting of indoor run mode, mainly used to meet the needs of special people on priority (e.g. leader, patients, etc). The factory default setting is that all indoor units are master (dial-up switch pulled to “ON” position).

When all the indoor units are set as slave, the outdoor unit will run according to the mode of slave indoor unit that is firstly started. If the mode of slave indoor unit started later has in conflict against the mode started earlier, the system will display mode conflict error, so that the indoor unit started later cannot work. In this case, the run mode of the unit is decided by the slave indoor unit that is firstly started.

When only one indoor unit is set as master, no matter if the master indoor unit is firstly started or not, the slave indoor unit will give out mode conflict error as long as its mode is in conflict against the mode of master indoor unit (except that the master indoor unit is stopped). In this case, the unit run according to the mode of master indoor unit on priority.

When several indoor units are set as master, the mode of master indoor unit with a lower address code will be taken as the master run mode of the unit. when the master indoor unit with the lowest address code is changed from STOP state to RUN state, the mode of other master indoor units or slave indoor units shall be kept identical to its mode; otherwise the system will give out mode conflict error. Therefore, when there are several master indoor units, the address code of the unit shall be set from lower to higher according to priority level.

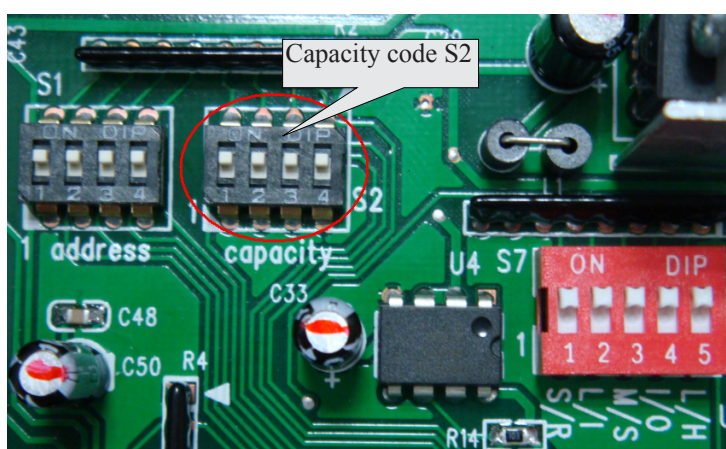
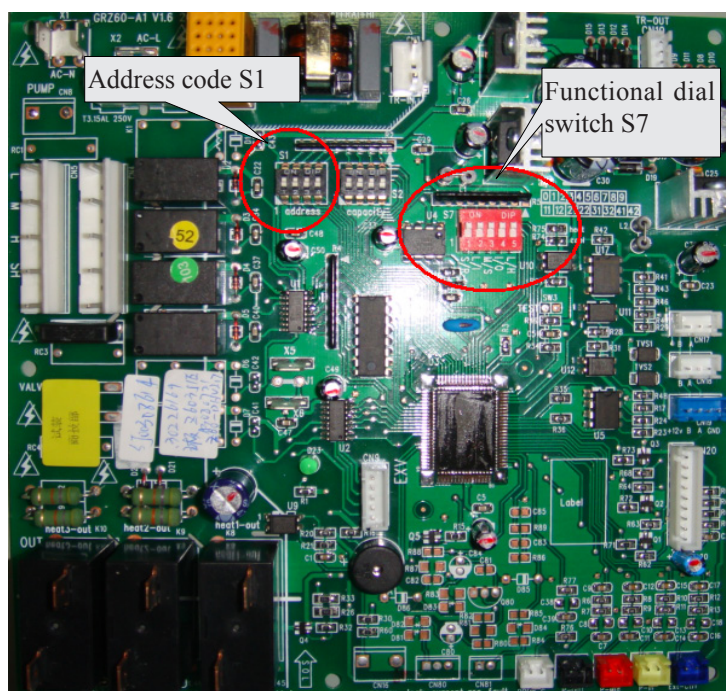
Dial-up switch 4 (I/O):

Setting of ambient temperature acquisition point. This setting is mainly used when the temperature of air conditioner area differs largely from the air inlet temperature of the unit. Meanwhile, this setting is only valid when the receiver is connected, including the setting of temperature acquisition point at air inlet and setting of the temperature acquisition point at receiver head. The factory default setting is acquisition of air inlet temperature (dial-up switch pulled to “ON” position).

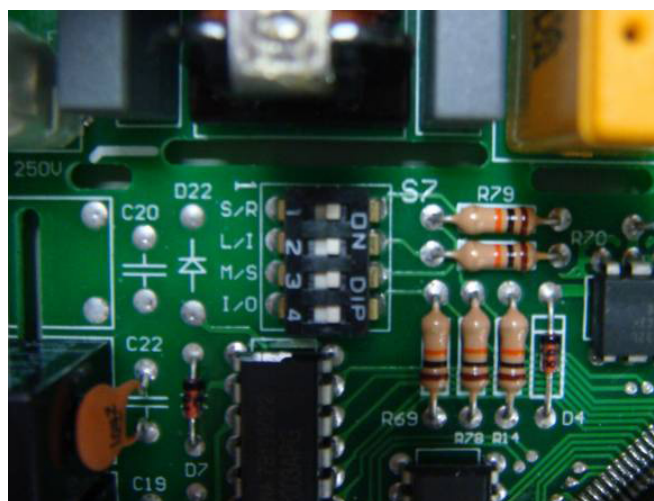
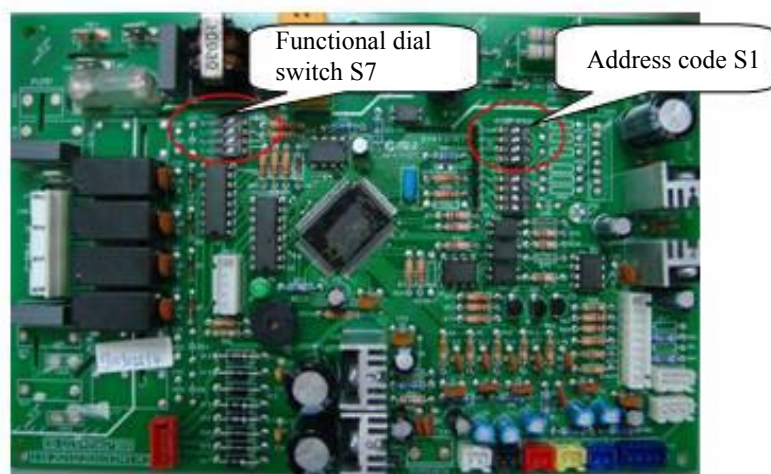
Dial-up switch 5 (L/H): Setting of high / low static pressure fan. This setting includes the setting of high static pressure fan and low static pressure fan, adjusted as needed for the project. The factory default setting is low static pressure fan (dial-up switch pulled to “ON” position).

Cautions:

- 1) The above settings must be done under power shutdown state.
- 2) The dial-up switch of function code is classified into 3-bit code, 4-bit code and 5-bit code. 3-bit code is used for wall mounted type unit and four-way cassette type unit. 5-bit code is used for duct-type unit, air handler type unit and floor ceiling type unit.
- 3) When the “setting of control mode” is “L”, the function dial-up for “setting of memory mode” and “setting of master / slave indoor unit” will be disabled. When the “setting of control mode” is “I”, this function dial-up setting is enabled.
- 4) The dial-up switch shall be put to position correctly, and shall not be put to middle position. Dialing of the switch to “ON” position indicates “0” and the dialing to opposite direction indicates “1”.
- 5) After dialing up, please mark the address code of the unit(✓).



Mainboard of 5-bit functional dial-up



Mainboard of 4-bit functional dial-up

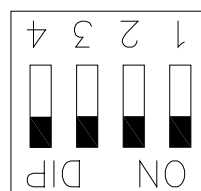
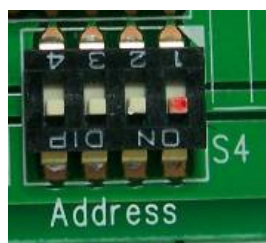
5.2.2 Address code

Address dial-up must be set for the multi indoor units; otherwise the abnormal communication will be caused to the unit. The address code has 4-bit dial-up in total. The highest address is 16 and the lowest address is 1.

⚠ NOTES!

To use multiple indoor units in parallel, make sure to change the setting of address code before installation and guarantee that the address code of each indoor unit must be different (The address code is located on the mainboard of indoor unit). If wired controller is used, make sure to dial the address code of wired controller to the position same as the address code on corresponding indoor unit. (The address code of wired controller is located on the back of wired controller)

◆ Below is factory default setting:



The default setting of address dial-up code is 0000 and the address is 1 (See above for the position of dial lever).

◆ Dial-up Value

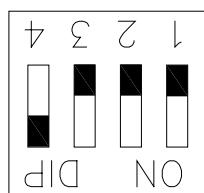
The dial-up value of address code is set in binary system. The dial-up value is “0” when the lever is dialed to “ON” end; the dial-up is “1” when the lever is dialed to numerical end on opposite side. For number 4~1 on the address code, the dial-up #4 refers to high bit and the dial-up 1# refers to low bit.

Dial-up Table (4-bit Dial-up Switch)				
4-bit	3-bit	2-bit	1-bit	Address
0	0	0	0	1
0	0	0	1	2
0	0	1	0	3
0	0	1	1	4
0	1	0	0	5
0	1	0	1	6
0	1	1	0	7
0	1	1	1	8
1	0	0	0	9
1	0	0	1	10
1	0	1	0	11
1	0	1	1	12
1	1	0	0	13
1	1	0	1	14
1	1	1	0	15
1	1	1	1	16

Example 1: If the dial value is “0111”, this represents that the serial number is “8”, the pins 1, 2 & 3 of the dial switch are dialed to the opposite end of “ON”, and the pin 4 is dialed to “ON”.

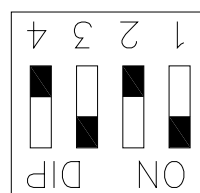
Example 2: If the dial value is “1010”, this represents that the address is “11”, the pins 2 & 4 of the dial switch are dialed to the numerical end, and the pin 1 & 3 are dialed to “ON”.

Refer to the following figure.



Address

Address 8, dial-up value 0111



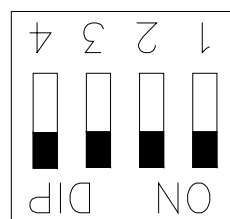
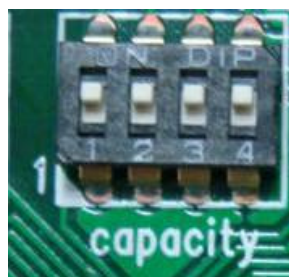
Address

Address 8, dial-up value 1010

5.2.3 Capacity Code

On the mainboard of indoor unit, two 4-bit DIP switches are used to distribute the address and capacity of indoor units. The 4-bit DIP switch (marked with “capacity” below) used for setting the capacity of indoor units is factory set before shipment of indoor unit, while it is covered by sealant, so that it cannot be changed by the user.

◆ Below is factory default setting:



Capacity

The default Capacity dial-up is the maximum capacity of indoor unit. As shown above, the capacity is (See above for the lever position)

◆ Dial-up Value

The dial-up value of capacity code is set in binary system. The dial-up value is “0” when the lever is dialed to “ON” end; the dial-up is “1” when the lever is dialed to numerical end on opposite side. For number 4~1 on the capacity code, the dial-up #4 refers to high bit and the dial-up 1# refers to low bit.

Dial-up Table (4-bit Dial-up Switch)				
4-bit	4-bit	4-bit	1-bit	Capacity
0	0	0	0	20
0	0	0	1	25
0	0	1	0	30
0	0	1	1	35
0	1	0	0	40
0	1	0	1	45
0	1	1	0	50
0	1	1	1	60
1	0	0	0	224
1	0	0	1	70
1	0	1	0	80
1	0	1	1	90
1	1	0	0	100
1	1	0	1	112
1	1	1	0	140
1	1	1	1	280

MAINTENANCE

MAINTENANCE

1 TROUBLE SHOOTING

1.1 Trouble Display of Indoor Unit

Error Code	Error	Source of error signal	Control description
E1	Compressor high pressure protection	High pressure switch	The high pressure protection value is 4.2MPa. When high pressure of a compressor is detected for successive three times, the compressor will stop. Error code E1 will be displayed and the running LED will blink.
E2	Indoor antifreezing protection	Temperature sensor of evaporator	When $T_{\text{evaporator}} \leq -2^{\circ}\text{C}$ lasts for 10min, the antifreezing protection will occur. The indoor electronic expansion valve will be closed and the capacity is 0.
E3	Compressor low pressure protection	Low pressure switch	When the low pressure protection value (0.15Mpa, absolute pressure) is reached, the low pressure switch will be disconnected. The low pressure protection will be displayed.
E4	Compressor discharge temperature protection	Discharge temperature sensor	When discharge temperature T is 113°C or higher, the stop protection will occur. E4 is displayed upon the first discharge protection. After discharge temperature is lower than $TR^{\circ}\text{C}$ and the unit stops for 3min, the compressor will resume running. If this occurs for three times in one hour, the compressor can not resume running. It is a must to cut off the power and restart the unit.
E5	Conversion overcurrent protection	Compressor driver	The driving board of conversion compressor is wrong. Refer to the error code of outdoor nixie tube for specific error information.
E6	Communication Error	Communication	There is communication error between the mainboard of indoor unit or wired controller and the outdoor unit. The wrong indoor unit will stop and display error code.
E7	Mode conflict	User operation	The running modes of the unit running first and that of later are variant. There is mode conflict among cooling, defrosting and heating mode. There is no mode conflict among fan, cooling, defrosting and heating mode. When mode conflict occurs, the indoor unit will display E7 and stop.
E9	Water full protection	Water pump	When the water is full for successive 8s, the water full protection will occur. The wired controller will display E9 and alarm will occur. In that case, the water pump will work while the other load of indoor unit will stop. The outdoor unit needs to adjust capacity output.
F0	Ambient temperature sensor error of indoor unit	Ambient temperature sensor of indoor unit	The indoor unit of temperature sensor error displays the error code and stop.
F1	Indoor coil pipe inlet temperature sensor error	Indoor coil pipe inlet temperature sensor	The indoor unit of temperature sensor error displays the error code and stop.
F2	Indoor coil pipe middle temperature sensor error	Indoor coil pipe middle temperature sensor	The indoor unit of temperature sensor error displays the error code and stop.
F3	Indoor coil pipe outlet temperature sensor error	Indoor coil pipe outlet temperature sensor	The indoor unit of temperature sensor error displays the error code and stop.
F4	Outdoor ambient temperature sensor error	Outdoor ambient temperature sensor	If short circuit occurs to the temperature sensor, there will be alarm.. The error information will be transmitted to each indoor unit, The error LED or wired controller will display the error code. When outdoor ambient temperature is lower than -5°C , the break circuit of outdoor temperature sensor will be shielded. It is treated according to -30°C .
F7	Outdoor defrosting temperature sensor error	Outdoor defrosting temperature sensor	If short circuit occurs to the temperature sensor, there will be alarm.. The error information will be transmitted to each indoor unit, The error LED or wired controller will display the error code. When outdoor ambient temperature is lower than -5°C , the break circuit of outdoor temperature sensor will be shielded. It is treated according to -30°C .
F9	Discharge temperature sensor error	Discharge temperature sensor	If short circuit occurs to the temperature sensor, there will be alarm.. The error information will be transmitted to each indoor unit, The error LED or wired controller will display the error code. When outdoor ambient temperature is lower than -5°C , the break circuit of outdoor temperature sensor will be shielded. It is treated according to -30°C .

Error Code of Duct Type Unit

Error	Error Code	Error	Error Code
Prevention against low temperature	E2	Error with oil temperature sensor 2 (digital)	Fb
Outdoor ambient temperature sensor error	F4	Indoor ambient temperature sensor error	F0
Outdoor tube-inlet sensor error	F5	Exhaust overtemperature	E4
Outdoor tube-middle sensor error	F6	Low-pressure protection	E3
Outdoor tube-exit sensor error	F7	Overcurrent Protector	E5
Error with exhaust temperature sensor 1 (fixed-frequency)	F8	High-pressure protection	E1
Indoor tube-inlet sensor error	F1	Communication error	E6
Indoor tube-middle sensor error	F2	High-pressure valve error	Fc
Indoor tube-exit sensor error	F3	Low-pressure valve error	Fd
Error with exhaust temperature sensor 2 (digital)	F9	Water-full protection (Cassette)	Eb
Error with oil temperature sensor 1 (fixed-frequency)	FA		

Error Code of Lengjingwang

Trouble name	Tube-inlet sensor error	Tube-middle sensor error	Tube-exit sensor error	Room sensor error	Defrost	Antifreeze	Mode conflict	Communication error	Outdoor unit failure	Tube-inlet sensor error
Electrical source LED	power LED	light	light	light	light	light	dark	dark	blink	blink
Operation LED	Running LED	dark	blink	blink	light	blink	dark	blink	blink	dark
Timing LED	timer LED	blink	blink	light	blink	dark	blink	light	blink	dark

Error Code of Knight and Fengshen Series

Error	Tube-inlet sensor error	Tube-middle sensor error	Tube-exit sensor error	Room sensor error	Defrost	Antifreeze	Mode conflict	Communication error	Outdoor unit failure
Operation LED	blink(1)				light	dark	blink	blink(2)	blink
Timing LED	blink				blink	blink	light	blink	dark

Notes:

[1] Bright and dark intermittently; [2] Bright and dark simultaneously.

1.2 Number of Indoor Unit

Note:

Press the SW3 button of outdoor unit for successive 2 times within 2s, and the number of indoor unit will be detected. In that case, LED1~ LED4 will blink in turn while LED5 and LED6 will be dark. The number of indoor unit will be shown 12s later.

Number of indoor unit	display					
	LED6	LED5	LED4	LED3	LED2	LED1
1	dark	dark	dark	dark	dark	light
2	dark	dark	dark	dark	light	dark
3	dark	dark	dark	dark	light	light
4	dark	dark	dark	light	dark	dark
5	dark	dark	dark	light	dark	light
6	dark	dark	dark	light	light	dark
:	:	:	:	:	:	:
:	:	:	:	:	:	:
62	light	light	light	light	light	dark
63	light	light	light	light	light	light

2 AFTER-SALES EMERGENCY MEASURES

When some unrecoverable fault occurs to one module which is connected with several others in parallel, the following emergency measures are recommended to guarantee the heating or cooling capacity of the indoor units and the service life of modules except the faulted one are not affected.

Step 1: set all indoor units under “Off” mode and cut off the power supply to the indoor and outdoor units.

Step 2: shut off all cutoff valves of the faulted outdoor unit, including the cutoff valves of the liquid/gas pipe as well as the oil balancing valve.

Step 3: cut off the air switch of the module.

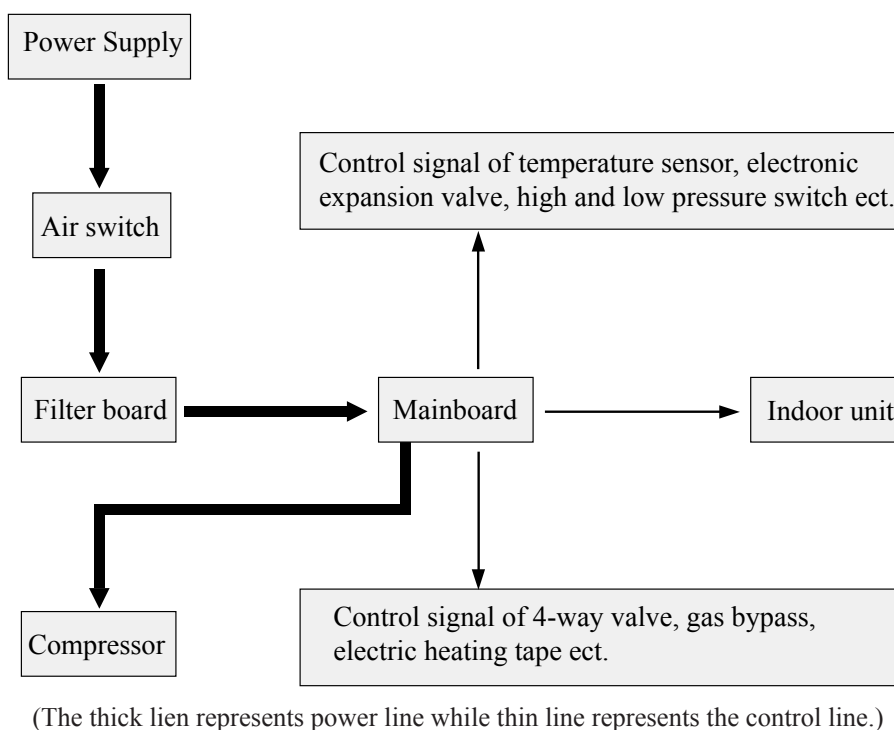
Step 4: remove the communication line between the faulted module and other modules which are still kept connected through the communication line.

Step 5: readjust the address and quantity settings on the main board of the modules except the faulted one.

Step 6: power and restart the unit

3 POWER DISTRIBUTION

3.1 Diagram of Power Distribution

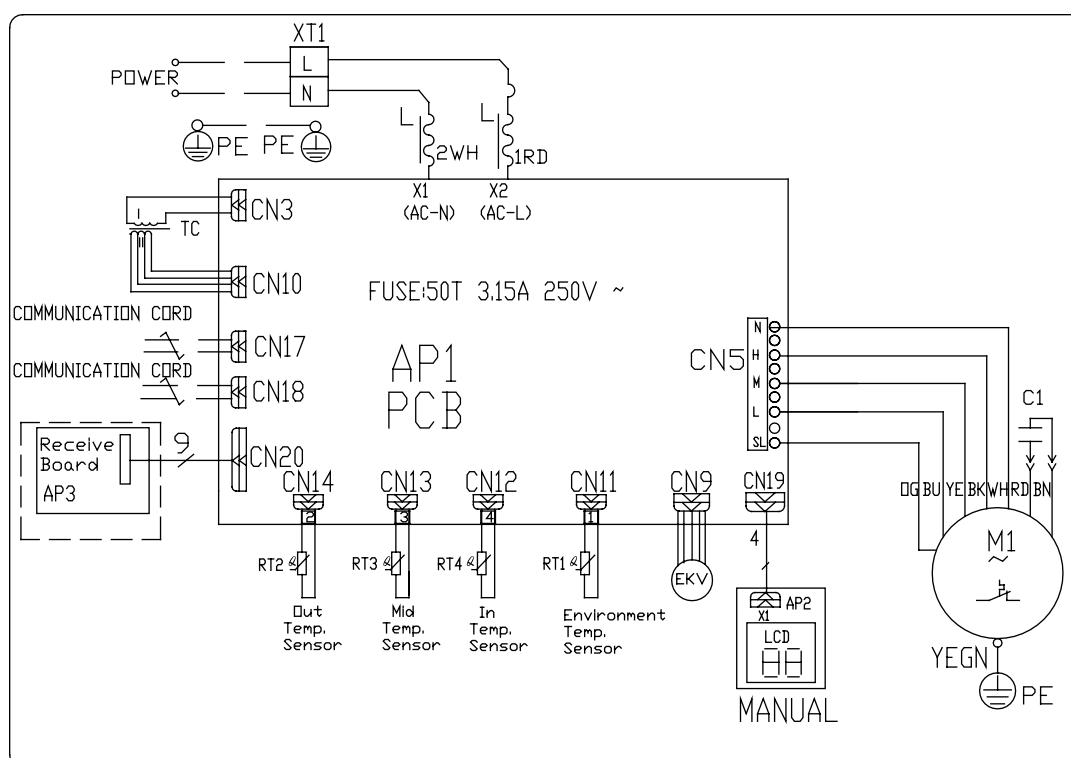


3.2 Wiring diagram

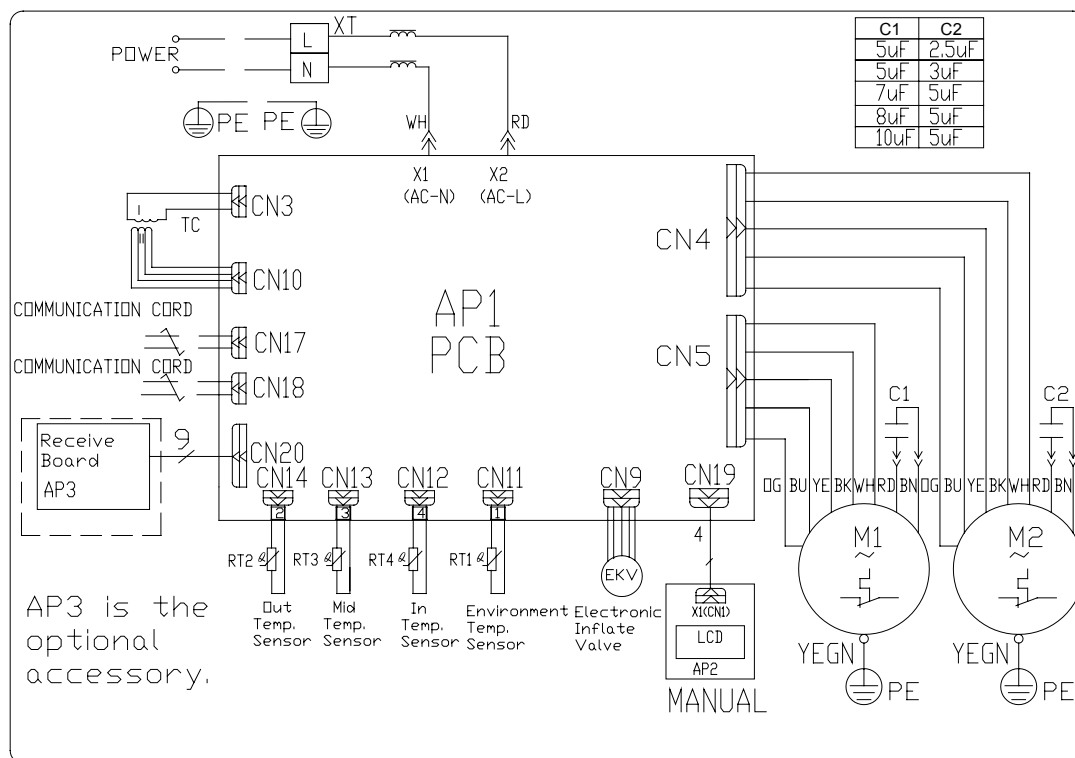
NOTE:

This drawing is just for reference; please always refer to the electric wiring stuck to the unit for actual wiring.

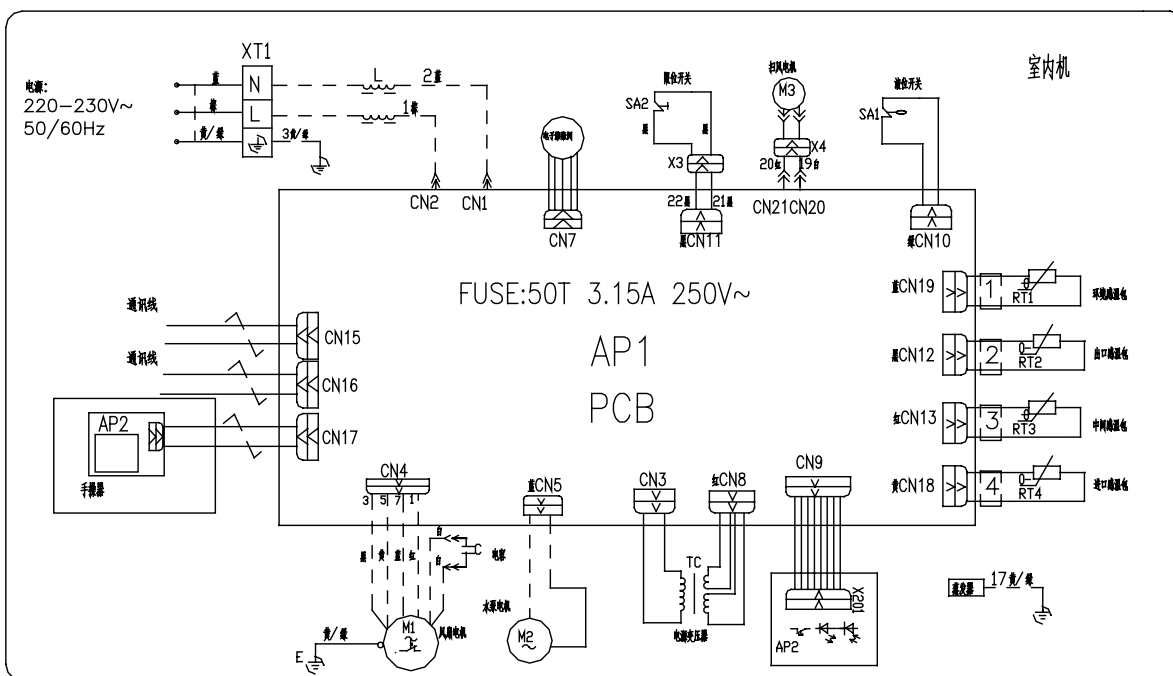
GMV-R22P/NaB-D, GMV-R28P/NaB-D, GMV-R36P/NaB-D, GMV-R56P/NaB-D, GMV-R71P/NaB-D



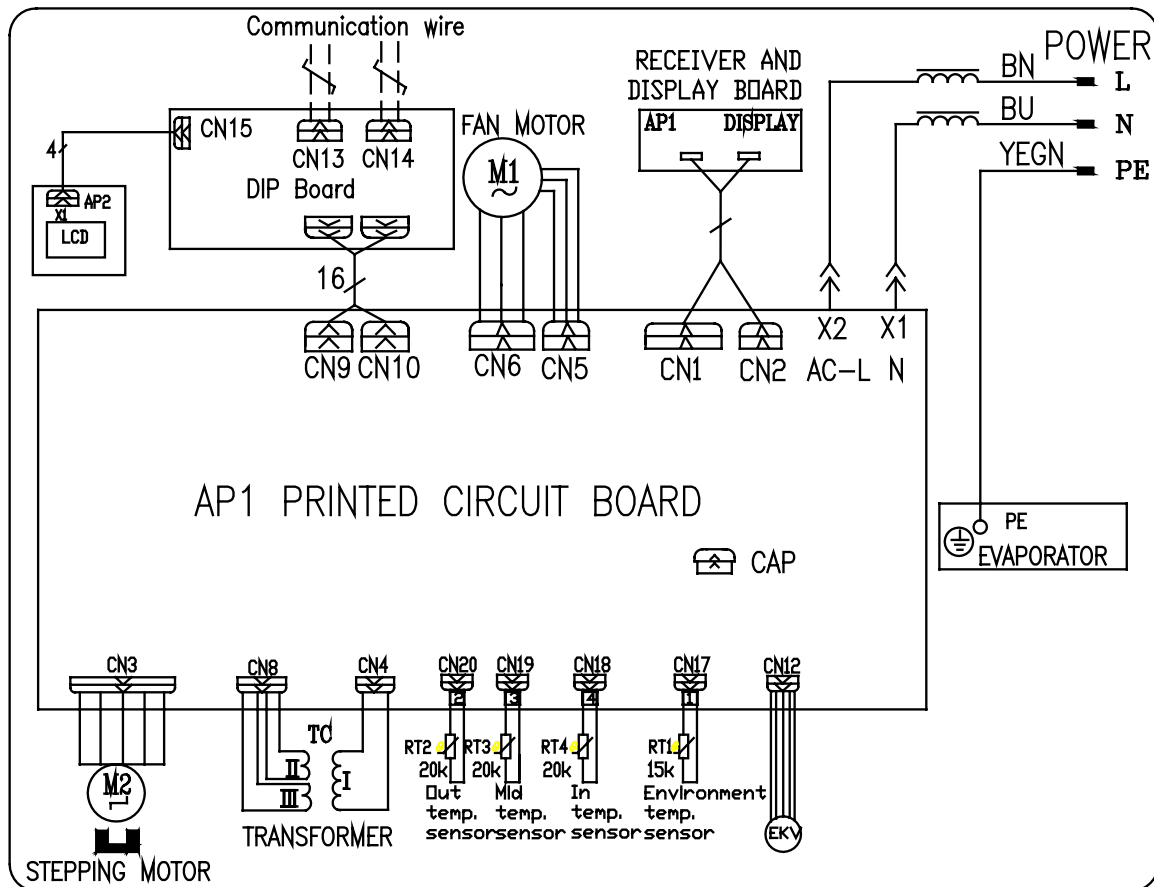
GMV-R90P/NaB-D, GMV-R112P/NaB-D, GMV-R140P/NaB-D



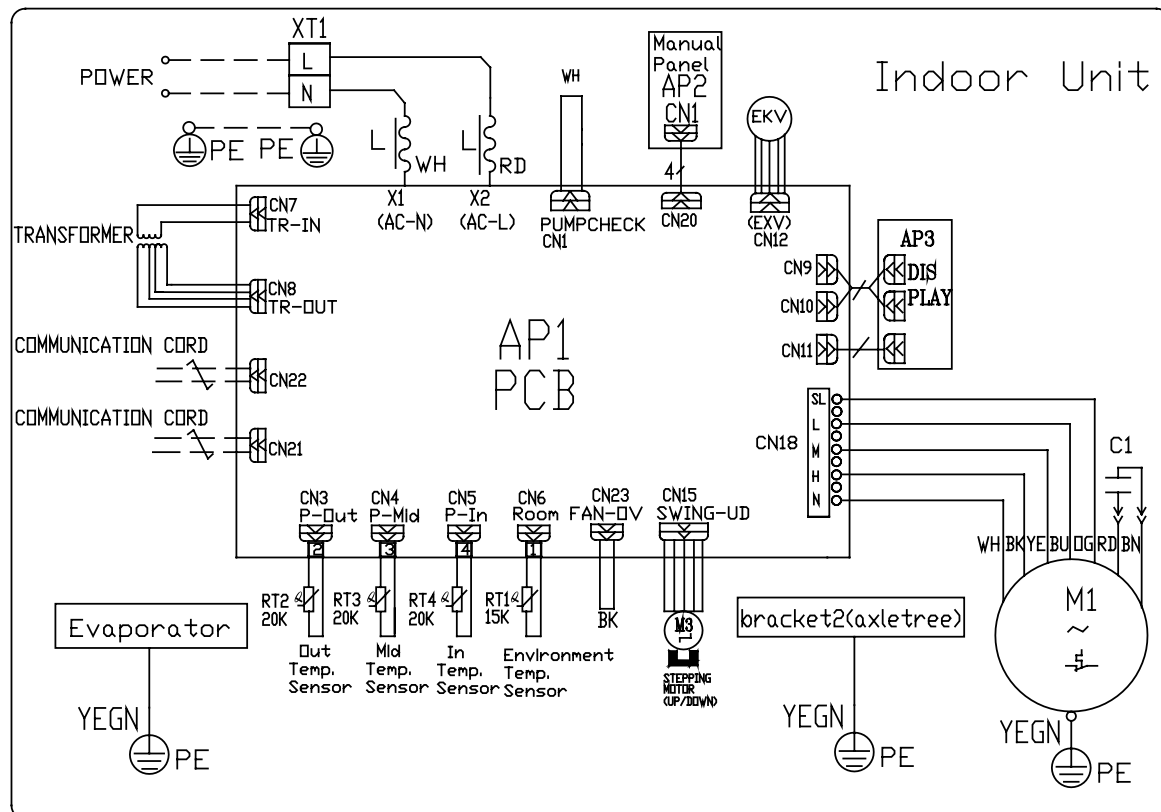
GMV-R28T/Na-D, GMV-R36T/Na-D, GMV-R56T/Na-D, GMV-R71T/Na-D, GMV-R90T/Na-D,
GMV-R112T/Na-D, GMV-R125T/Na-D, GMV-R140T/Na-D



GMV-R22G/NaG-D, GMV-R28G/NaG-D, GMV-R36G/NaG-D, GMV-R45G/NaG-D, GMV-R50G/NaG-D,
GMV-R56G/NaG-D, GMV-R71G/NaG-D



GMV-R28Zd/NaB-D, GMV-R36Zd/NaB-D, GMV-R50Zd/NaB-D

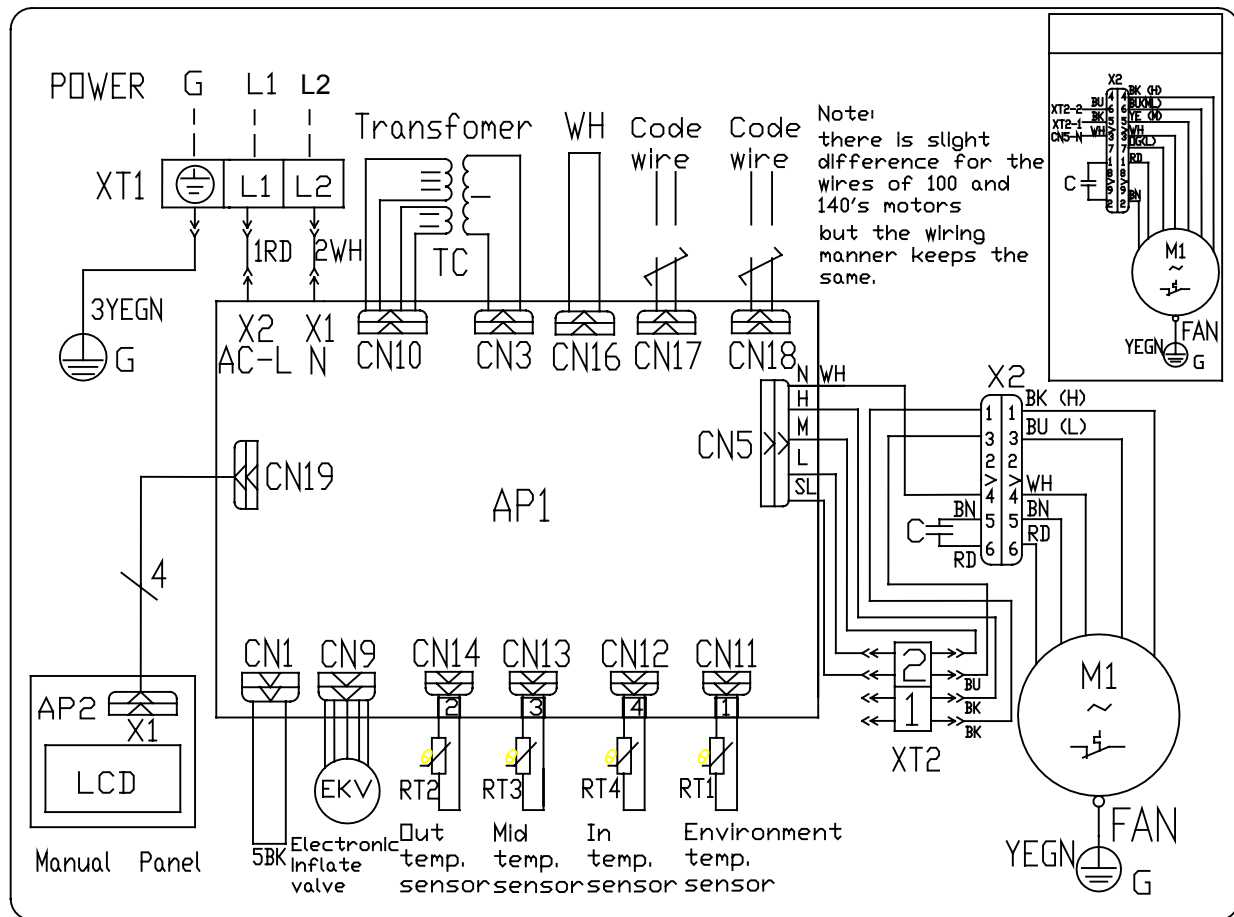


The diagram illustrates the electrical connections for the Indoor Unit. Key components and their connections include:

- Power Section:** A power source (POWER) is connected to a terminal block (XT1) with L, N, and PE lines. The L and N lines pass through fuses (L and N) and are connected to the main power bus (WH and RD).
- Transformer Section:** A transformer is connected to the main power bus via terminals CN7 (LTR-IN) and CN8 (LTR-OUT).
- Communication Cord Section:** Two communication cords are connected to the main power bus via terminals CN22 and CN21.
- AP1 PCB Section:** The central component is the AP1 PCB, which is connected to various sensors and components:
 - Sensors:** RT2 (Out Temp. Sensor), RT3 (Mid Temp. Sensor), RT4 (In Temp. Sensor), and RT14 (Environment Temp. Sensor) are connected to the main power bus via terminals CN3, CN4, CN5, and CN6 respectively.
 - FAN-ON:** A fan control component is connected to the main power bus via terminal CN23.
 - SWING-UD:** A swing control component is connected to the main power bus via terminal CN15.
- AP2 and AP3 Panels:** The AP2 panel is connected to the main power bus via terminal CN1. The AP3 panel is connected to the main power bus via terminals CN9, CN10, and CN11.
- Other Components:** A PUMPCHACK component is connected to the main power bus via terminal CN1. A manual panel is connected to the main power bus via terminal CN20. A manual panel is also connected to the main power bus via terminal CN12.
- Motor Section:** A motor (M1) is connected to the main power bus via terminals N, SL, L, W, and H. The motor is also connected to a PE line via terminal YE.

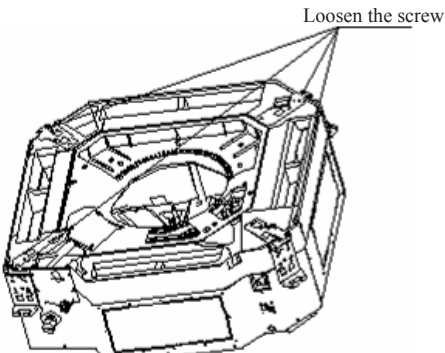
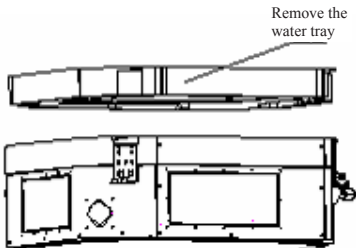
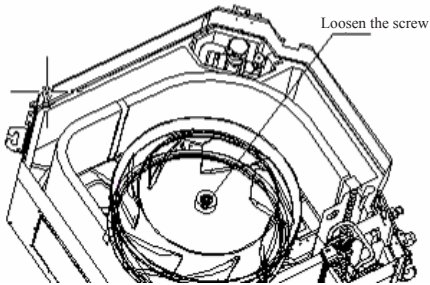
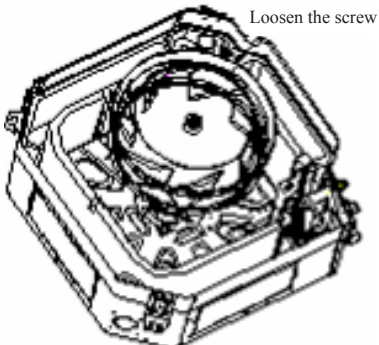
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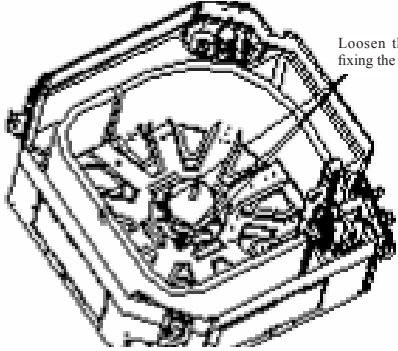
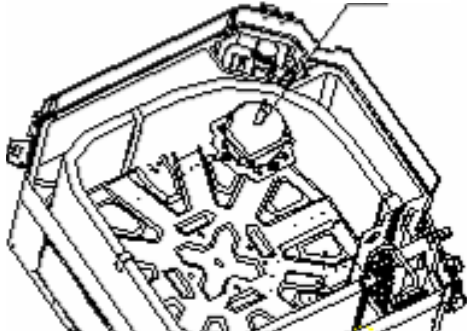
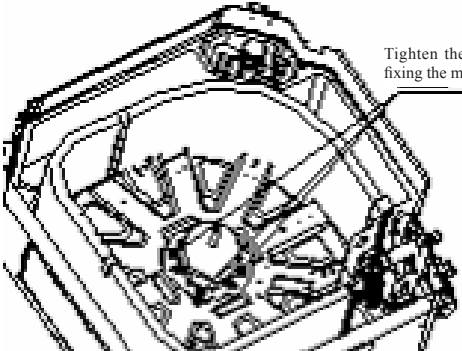
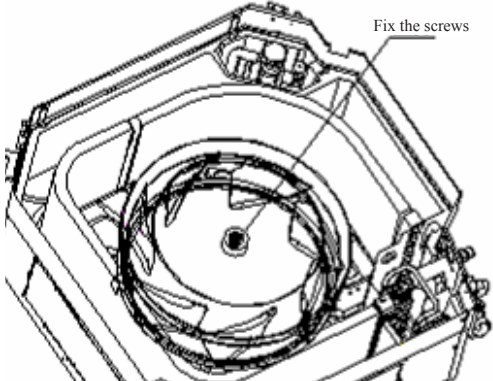
GMV-R140A/Na-D

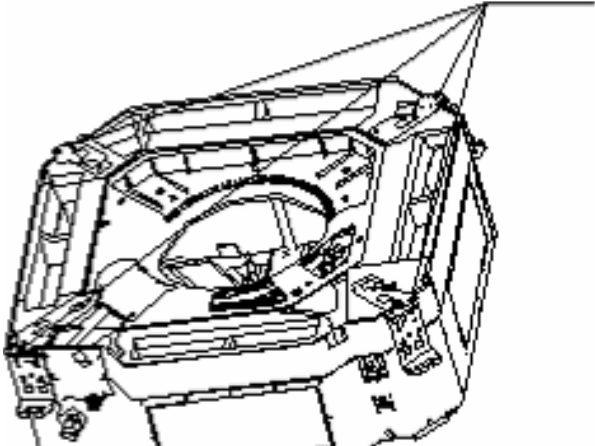


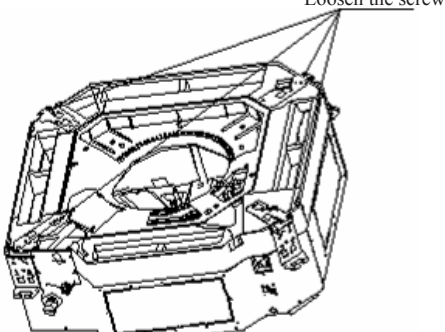
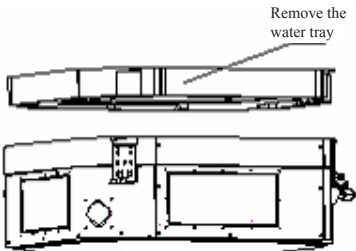
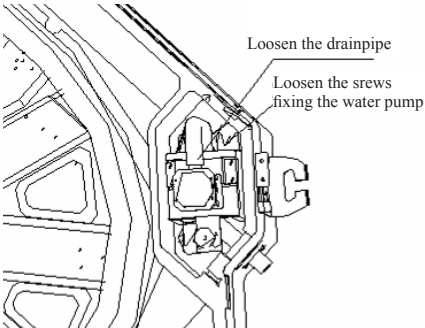
4 DISASSEMBLY AND ASSEMBLY PROCEDURE OF MAIN PARTS


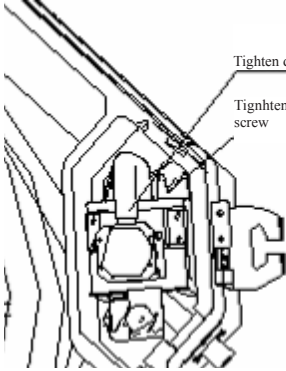
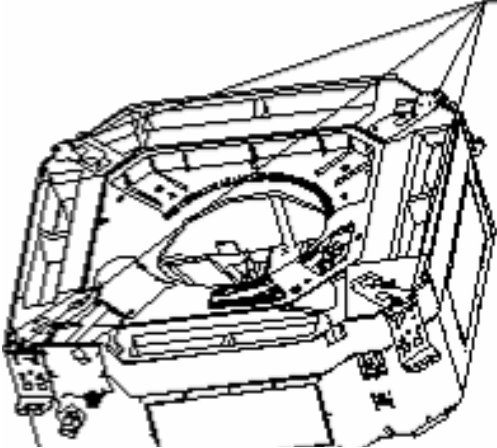
4.1 Cassette Type Unit

Removal and Assembly of Fan Motor		
Step	Illustration	Handling Instruction
1. Loosen the screws fixing the water tray		<ul style="list-style-type: none"> ● Use screwdriver to loosen the screws fixing the water tray
2. Remove the water tray		<ul style="list-style-type: none"> ● Remove the water tray
3. Loosen the bolts fixing the fan		<ul style="list-style-type: none"> ● Use spanner to loosen the bolts fixing the fan
4. Remove the fan		<ul style="list-style-type: none"> ● Remove the fan

<p>5. Loosen the screws fixing the motor</p>	 <p>Loosen the screws fixing the motor</p>	<ul style="list-style-type: none"> ●Use screwdriver to loosen the screws fixing the motor
<p>6. Remove the motor and replace it</p>	 <p>Remove the motor</p>	<ul style="list-style-type: none"> ●Remove the motor and replace it
<p>7. Tighten the screws fixing the motor</p>	 <p>Tighten the screws fixing the motor</p>	<ul style="list-style-type: none"> ●Tighten the screws fixing the motor
<p>8. Mount the fan and tighten the fixing bolts</p>	 <p>Fix the screws</p>	<ul style="list-style-type: none"> ●Mount the fan and use spanner to tighten the bolts fixing the fan.

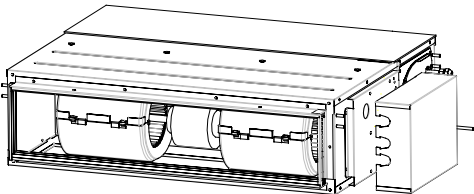
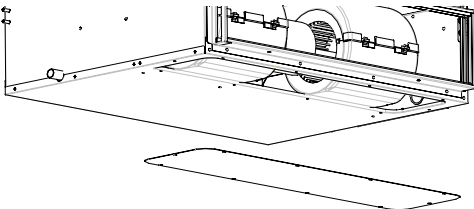
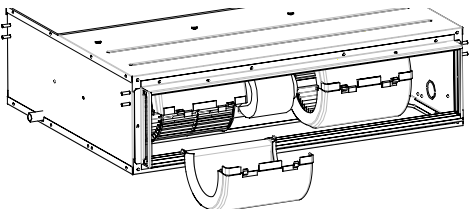
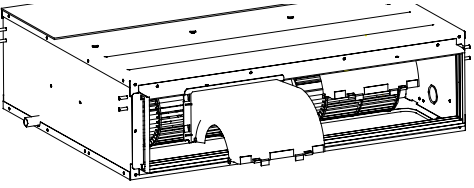
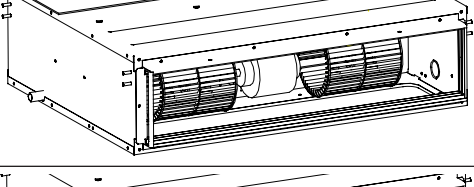
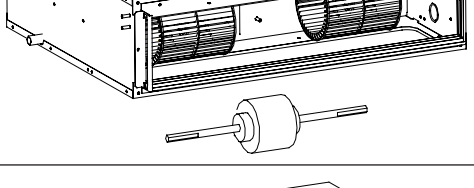
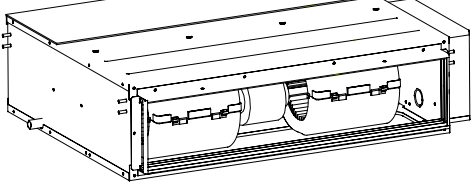
<p>9. Mount the water tray and tighten the screws</p>	 <p>Tighten the screws</p>	<ul style="list-style-type: none"> ●Use screwdriver to loosen the screws fixing the water tray
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Removal and Installation of Water Pump		
Step	Illustration	Handling Instruction
<p>1. Loosen the screws fixing the water tray</p>	 <p>Loosen the screw</p>	<ul style="list-style-type: none"> ●Use screwdriver to loosen the screws fixing the water tray
<p>2. Remove the water tray</p>	 <p>Remove the water tray</p>	<ul style="list-style-type: none"> ●Remove the water pump and replace it.
<p>3. Connect the drainage pipe and tighten the screws fixing the water pump.</p>	 <p>Loosen the drainpipe</p> <p>Loosen the screws fixing the water pump</p>	<ul style="list-style-type: none"> ●Connect the drainage pipe and use screwdriver to tighten the screws fixing the water pump.

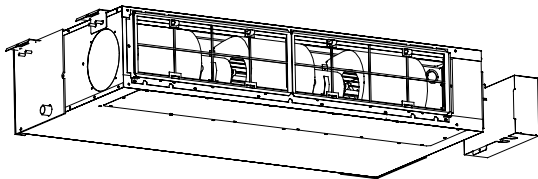
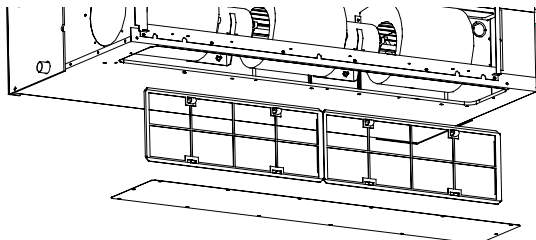
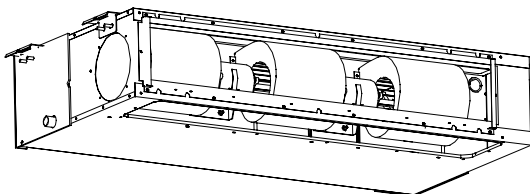
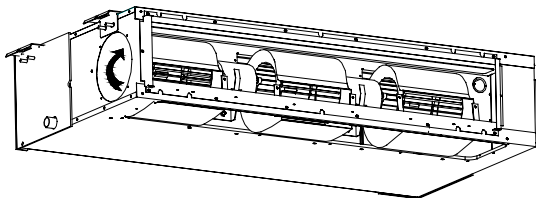
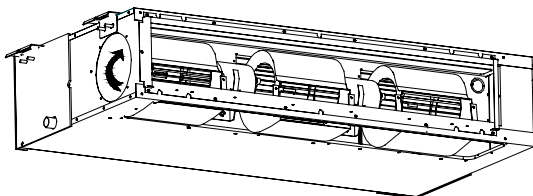
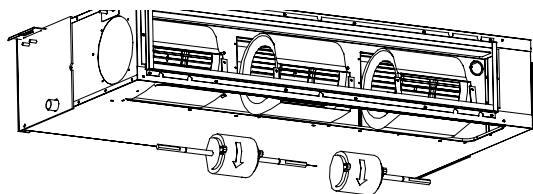
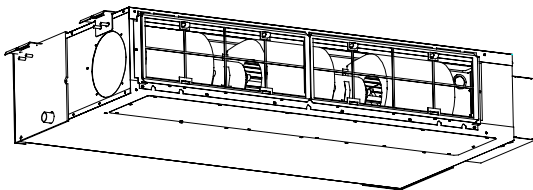
<p>4 Remove the water pump and replace it.</p>	 <p>Remove the water pump</p>	<ul style="list-style-type: none"> ● Remove the water pump and replace it.
<p>5. Remove the water pump and replace it.</p>	 <p>Tighten drainpipe</p> <p>Tighten water pump and fix the screw</p>	<ul style="list-style-type: none"> ● Remove the water pump and replace it.
<p>6. Mount the water tray and tighten the screws</p>	 <p>Tighten the screws</p>	<ul style="list-style-type: none"> ● Use screwdriver to tighten the screws fixing the water tray

4.2 Air Duct Type

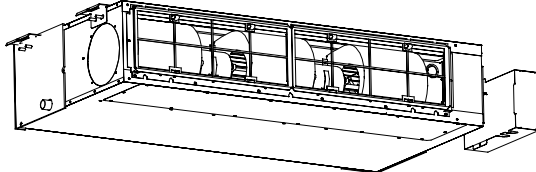
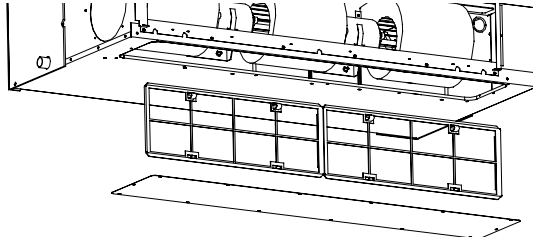
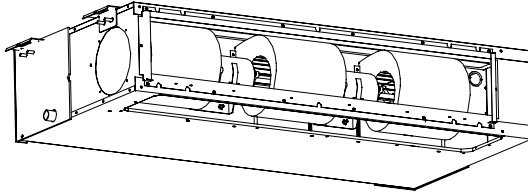
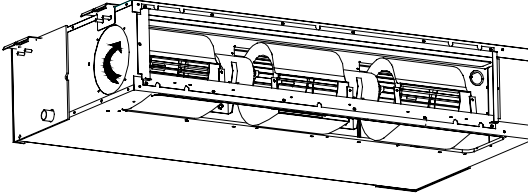
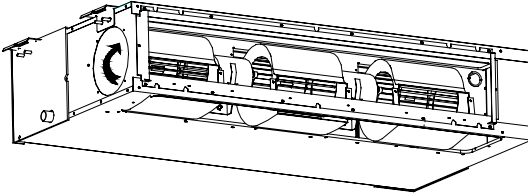
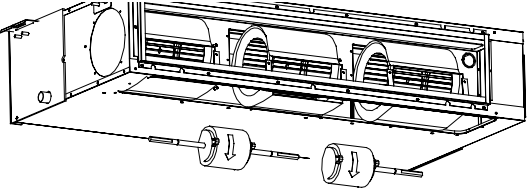
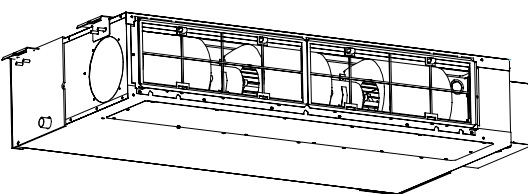
Duct-Type Unit:2.2 kW~5.0 kW

Removal and Assembly of Fan Motor		
Remarks: Before removing the fan, make sure to cut off the power firstly.		
Step	Illustration	Handling Instruction
1. Unplug the motor cables		<ul style="list-style-type: none"> ● Cut off the power supply of indoor unit. Use screwdriver to remove the electric box cover and unplug the motor cables in electric box.
2. Remove the return air cover board		<ul style="list-style-type: none"> ● Use screwdriver to remove the lower return air cover board.
3. Remove the back propeller housing		<ul style="list-style-type: none"> ● Loosen the clamp between back propeller housing and front propeller housing. Remove the back propeller housing.
4. Remove the front propeller housing		<ul style="list-style-type: none"> ● Use screwdriver to loosen the screws fixing the front propeller housing. Remove the front propeller housing.
5. Loosen the fan and motor		<ul style="list-style-type: none"> ● Use inner hexagonal spanner to loosen the screws on fan and remove the clamp fixing the motor
6. Remove the motor		<ul style="list-style-type: none"> ● Firstly, disengage the motor from motor support and then disengage the fan from the motor. Then, remove the motor from the lower air inlet frame. In which, for the motor with automatic motor support, the motor support shall be removed in advance and then changed to the unit.
7. Replace with a new motor		<ul style="list-style-type: none"> ● Assemble the unit in reverse to the disassembly procedures and energize it for testing.

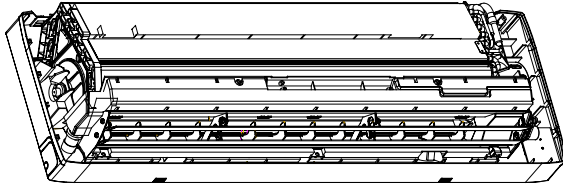

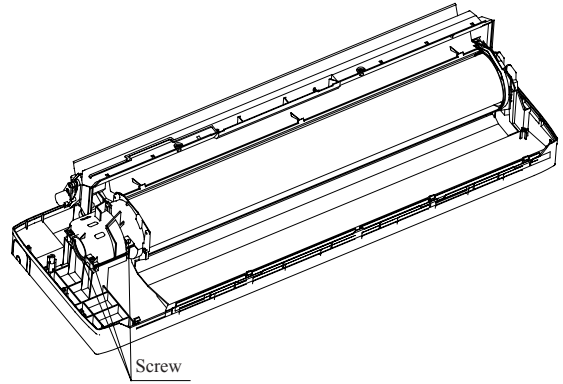
Duct-Type Unit: 5.6 kW~8.0 kW

Removal and Assembly of Fan Motor		
Remarks: Before removing the fan, make sure to cut off the power firstly.		
Step	Illustration	Handling Instruction
1. Unplug the motor cables		<ul style="list-style-type: none"> ●Cut off the power supply of indoor unit. Use screwdriver to remove the electric box cover and unplug the motor cables in electric box.
2. Remove the filter sub-assembly and air inlet cover board		<ul style="list-style-type: none"> ●Remove the filter sub-assembly from the air inlet frame and use screwdriver to remove the air inlet cover board.
3. Remove the screws on fan sub-assembly.		<ul style="list-style-type: none"> ●Remove the screws on fan sub-assembly.
4. Overturn the propeller housing		<ul style="list-style-type: none"> ●Rotate the propeller housing to the air inlet opening according to arrow direction.
5. Loosen the fan and motor.		<ul style="list-style-type: none"> ●Use inner hexagonal spanner to loosen the screws on fan and remove the clamp fixing the motor.
6. Replace the motor		<ul style="list-style-type: none"> ●Firstly, disengage the motor from motor support. Then, sequentially disengage the fan sub-assembly from the motor shaft. Remove the motor from the air inlet and replace with new motor. In which, for the motor with automatic motor support, the motor support shall be removed in advance and then changed to the unit.
7. Assemble the unit in reverse to the disassembly procedures		<ul style="list-style-type: none"> ●Assemble the unit in reverse to the disassembly procedures and energize it for testing.

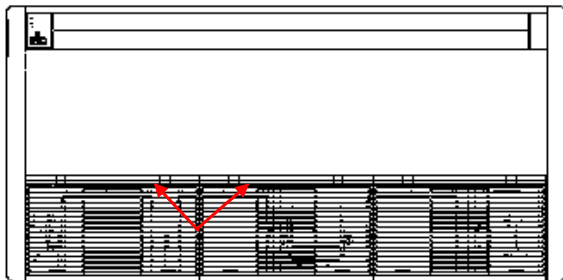
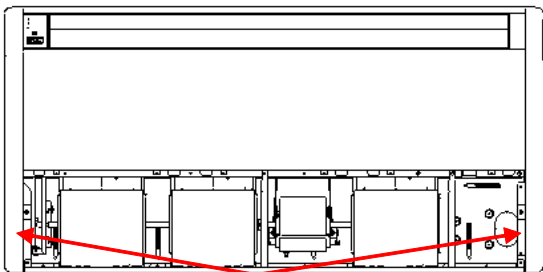
Duct-Type Unit: 9.0 kW~14.0 kW

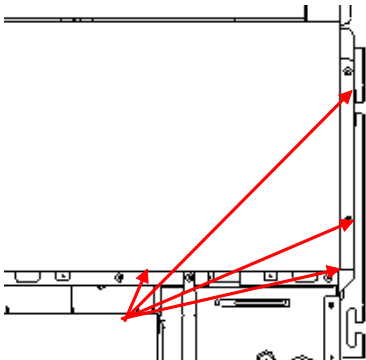
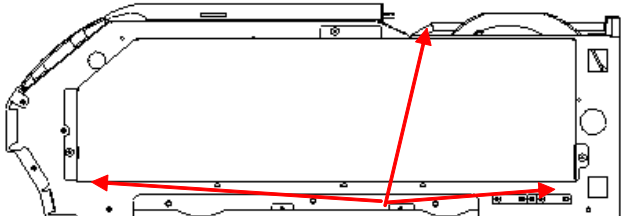
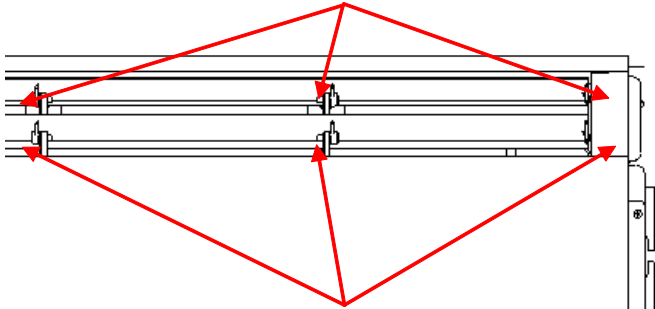
Removal and Assembly of Fan Motor		
Remarks: Before removing the fan, make sure to cut off the power firstly.		
Step	Step	Step
1. Disconnect the motor wire		<ul style="list-style-type: none"> ●Cut off the power supply of indoor unit. Use screwdriver to remove the electric box cover and unplug the motor cables in electric box
2. Disassemble filtering screen and the return air cover board		<ul style="list-style-type: none"> ●Remove the filter sub-assembly from the air inlet frame and use screwdriver to remove the return air cover board.
3. Loosen the screw on the motor subassembly.		<ul style="list-style-type: none"> ●Remove the screws on fan sub-assembly.
4. Rotate the volute		<ul style="list-style-type: none"> ●Rotate the propeller housing to the air inlet opening according to arrow direction.
5. Loosen the blade and motor		<ul style="list-style-type: none"> ●Use inner hexagonal spanner to loosen the screws on fan and remove the clamp fixing the motor.
6. Replace the motor		<ul style="list-style-type: none"> ●Firstly, disengage the motor from motor support. Then, sequentially disengage the fan sub-assembly from the motor shaft. Remove the motor from the air inlet and replace with new motor. In which, for the motor with automatic motor support, the motor support shall be removed in advance and then changed to the unit.
7. Mount the unit according to disassembly sequence		<ul style="list-style-type: none"> ●Assemble the unit in reverse to the disassembly procedures and energize it for testing.

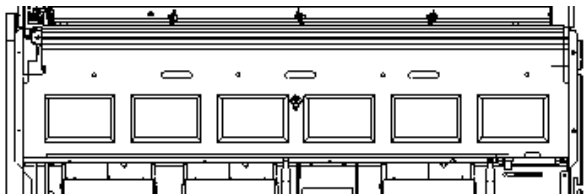
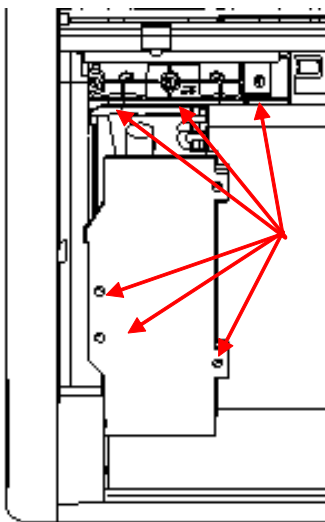
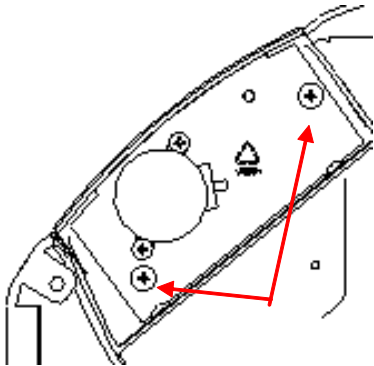
4.3 Wall Mounted Type

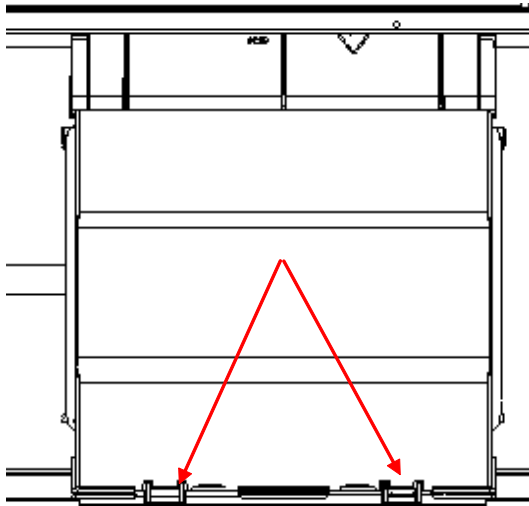
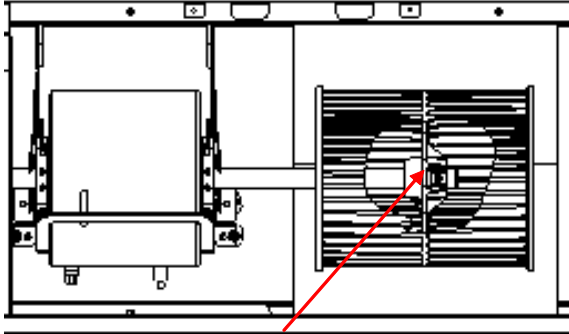
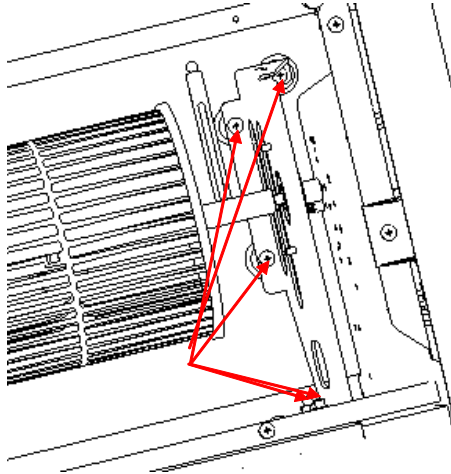
Removal and Assembly of Fan Motor		
Remark: Before removing the compressor, make sure that there is no refrigerant inside the pipe system and that the power has been cut off.		
Step	Illustration	Handling Instruction
1. Firstly, remove the front panel, front case and electric box		<ul style="list-style-type: none"> ●Firstly, use screwdriver to loosen the screws. ●Unplug the motor terminals in the electric box. Loosen the earth screws and lift up.
2. Remove the evaporator		<ul style="list-style-type: none"> ●Firstly, use screwdriver to remove the fixing screws on the left and right side. Then, remove the evaporator.
3. Remove the motor and cross flow fan		<ul style="list-style-type: none"> ●Use screwdriver to remove the screws fixing the motor clamp and remove the screws connecting the motor and cross flow fan. Then, the motor can be separated from the cross flow fan.

4.4 Floor Ceiling Type

Disassembly of panel grating module		
<p>Remark: Make sure that the power supply is cut off before disassembling and protect all the parts during disassembly. Do not put filter screen near the high temperature heat source.</p>		
Step	Illustration	Handling Instruction
Remove sub-assy of front grill		<ul style="list-style-type: none"> ● Move down the clip of the sub-assy of front grill until the front grill is open. (As is shown in the graph, arrow represents the position of buttons. There are two clips for each grating.)
Remove right and left finishing plates		
<p>Remark: Make sure the power supply is cut off before disassembling and protect all the parts during disassembly. Do not scratch the outer parts.</p>		
Step	Illustration	Handling Instruction
Remove right and left finishing plates		<ul style="list-style-type: none"> ● Remove the screws as shown in the graph with screwdriver and then push upward to remove the right and left finishing plates. (As is shown in the graph, arrow represents the position of screws.)

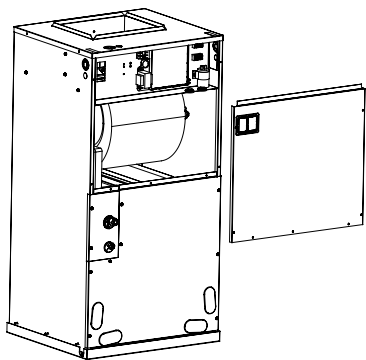
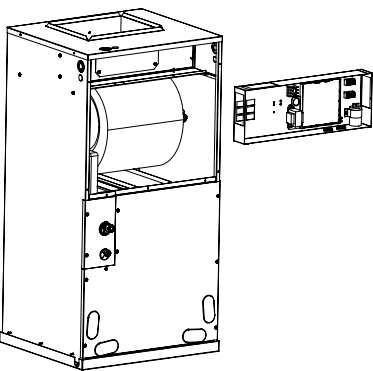
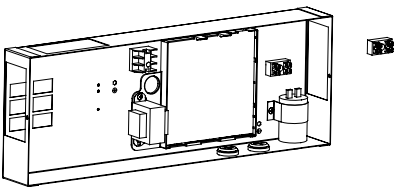
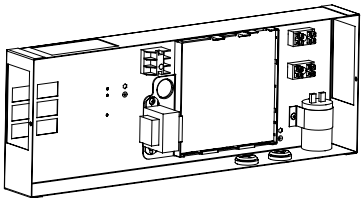
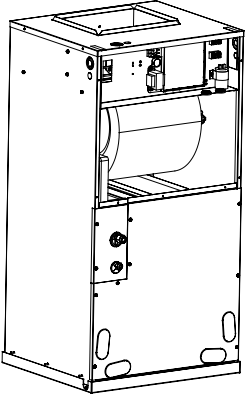
Remove panel parts		
Remark: Make sure the power supply is cut off before disassembling and protect all the parts during disassembly. Do not scratch the outer parts.		
Step	Illustration	Handling Instruction
Remove panel parts		<ul style="list-style-type: none"> Remove the screws shown by the arrow in the graph with screwdriver (two on both right and left and 4 in the front) and then remove the panel parts.
Remove sub-assy of electric box		
Remark: Make sure that the power supply is cut off before disassembling and protect all the parts during disassembly, especially the components inside the box in case of water and hit.		
Step	Illustration	Handling Instruction
1. Remove of electric box cover		<ul style="list-style-type: none"> Remove 3 screws as shown by the arrow in the graph on left and remove the electric box cover.
Remove air deflecting plate modules		
Remark: Make sure the power supply is cut off before disassembling and protect all the parts during disassembly, especially the joints of the air deflecting plate.		
Step	Illustration	Handling Instruction
Remove sub-assy of air deflecting plate		<ul style="list-style-type: none"> Remove the air deflecting plates from the air deflecting plate support assembly, and then remove both ends from the air sweeping motor. joint (As is shown in the graph, arrow represents the support assembly and circle the air sweeping motor joint.)

Remove water-containing plate modules		
Remark: Make sure the power supply is cut off before disassembling and protect all the parts during disassembly.		
Step	Illustration	Handling Instruction
Remove water-containing plate modules		<ul style="list-style-type: none"> ● remove the water-containing plate modules.
Remove evaporator components		
Remark: Make sure that the power supply is cut off and protect the copper tube and aluminum fin. If the time for disassembly shall be long, seal the copper tube .		
Step	Illustration	Handling Instruction
Remove evaporator components		<ul style="list-style-type: none"> ● Remove the screws as shown by the arrow in the graph with screwdriver. (There are 6 screws on left and right of the evaporator and 5 on evaporator outlet press plate modules)
Remove fixing plate sub-assy for air sweeping fans		
Remark: Make sure that the power supply is cut off before disassembling and protect all the parts during disassembly.		
Step	Illustration	Handling Instruction
Remove fixing plate sub-assy for air sweeping fans		<ul style="list-style-type: none"> ● Remove the screws shown in the graph with screwdriver.

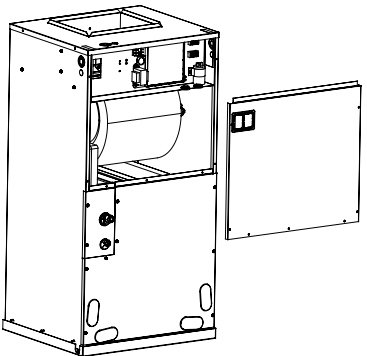
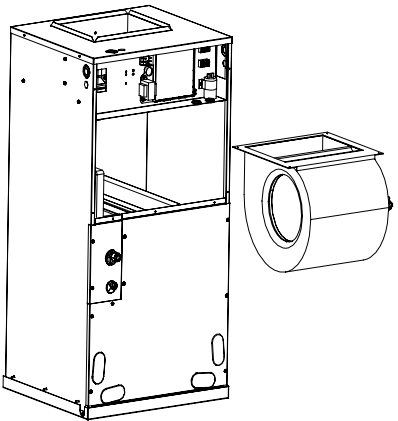
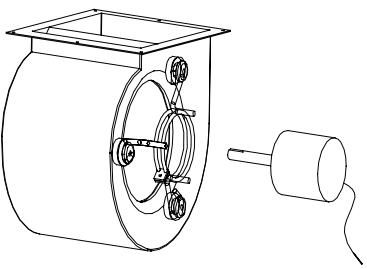
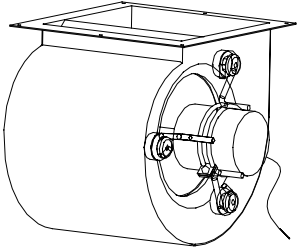
Remove fan and motor components		
<p>Remark: Make sure that the power supply is cut off before disassembling and protect all the parts during disassembly, especially the fastening screws for fans.</p>		
Step	Illustration	Handling Instruction
1. Remove front and back scroll cases		<ul style="list-style-type: none"> Press the buckle at the joints of front and back scroll cases with hands and pull upward to remove the front scroll case. Then remove the screws on the back scroll case. Lift the buckle of back scroll case with hands and remove it. (As is shown in the graph, circle represents 2 screws on left and right.)
2. Remove fans		<ul style="list-style-type: none"> Remove the fixing screws of fan wheel with inner hexagonal and remove the wheel. The inner hexagonal and its direction of effect are shown by the arrow in the graph.
3. Remove bearing fixing plates		<ul style="list-style-type: none"> Remove 4 screws on the bearing fixing plates with screwdriver. (As shown in the box in the graph)

4.5 Air Handler Type

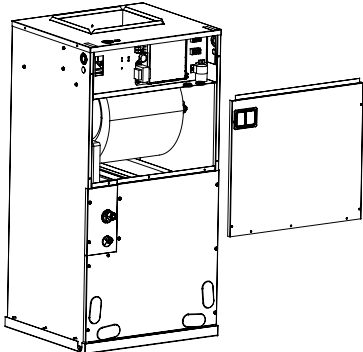
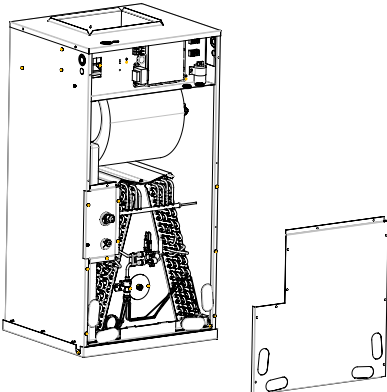
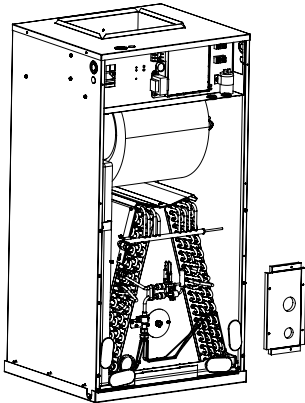
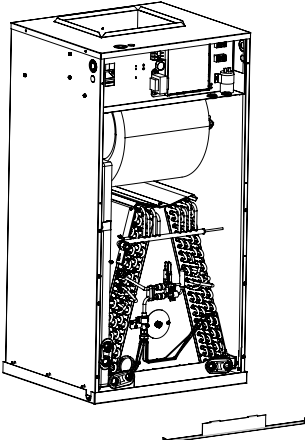
4.5.1 Disassembly and Assembly of Electric Box

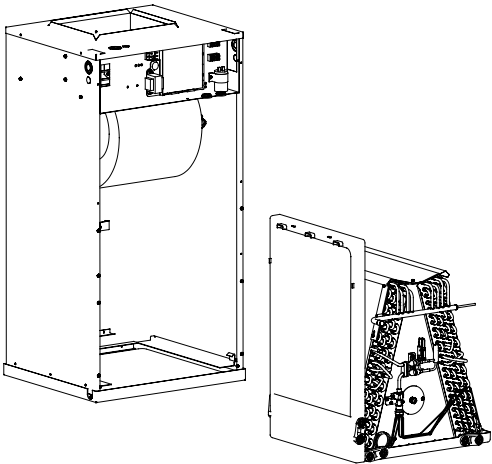
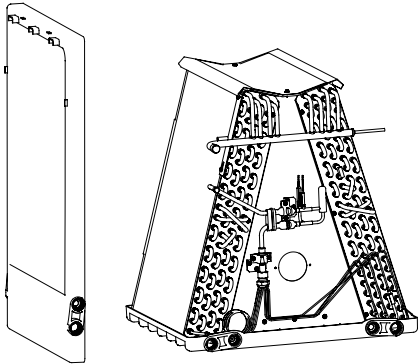
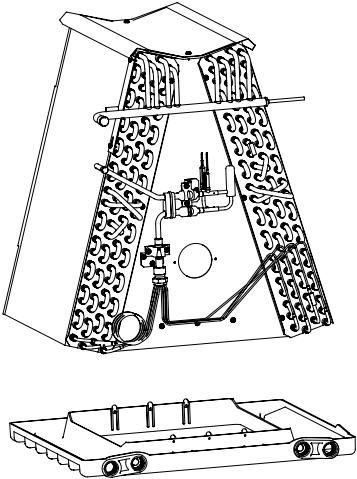
Steps	Illustration	Handling instruction
1. Remove the top cover plate.		<ul style="list-style-type: none"> •Loosen the fixing screws around the top cover plate with a screwdriver. •Remove the top cover plate from the frontage of the unit.
2. Remove the electric box.		<ul style="list-style-type: none"> •Disconnect the power cord and control cable of the terminal, and then pull them out. •Loosen the fixing screws around the electric box with a screwdriver. •Remove the electric box from the frontage of the unit.
3. Remove the electric parts.		<ul style="list-style-type: none"> •Disconnect the terminal of the electric parts. •Loosen the fixing screws around the electric parts with a screwdriver. •Remove the electric parts from the electric box
4. Install new electric parts.		<ul style="list-style-type: none"> •Lay the electric parts in the right position. •Tighten the fixing screws around the electric parts with a screwdriver. •Connect the terminal of electric parts.
5. Install the electric box.		<ul style="list-style-type: none"> •Lay the electric box in the right position. •Tighten the fixing screws around the electric box with a screwdriver. •Connect the power cord and control cable of the terminal. •Install the unit according to the previous steps.

4.5.2 Disassembly and Assembly of Fan motor

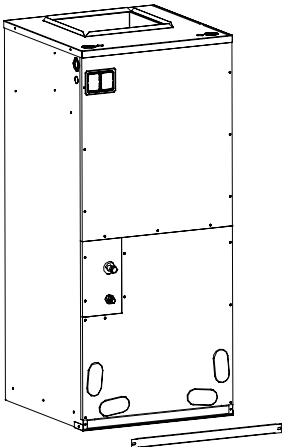
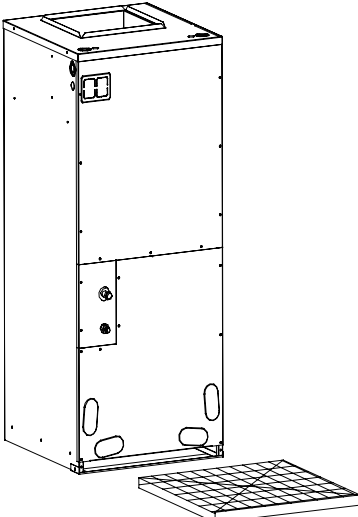
Steps	Illustration	Handling instruction
1. Remove the top cover plate.		<ul style="list-style-type: none"> ● Loosen the fixing screws around the top cover plate with a screwdriver. ● Remove the top cover plate from the frontage of the unit.
2. Remove the fan motor sub-assy.		<ul style="list-style-type: none"> ● Disconnect the terminal of the fan motor, and then pull out the wire. ● Loosen the fixing screws in the front of fan motor with a screwdriver. ● Remove the fan motor sub-assy from the frontage of the unit.
3. Remove the motor.		<ul style="list-style-type: none"> ● Loosen the fixing screws of the motor and the louver. ● Loosen the fixing screws of the motor support. ● Remove the motor from the right side of the fan motor.
4. Install a new motor.		<ul style="list-style-type: none"> ● Lay the motor in the right position. ● Tighten the fixing screws of the motor and the louver. ● Tighten the fixing screws of the motor support. ● After changing the motor, install the unit according to the previous steps.

4.5.3 Disassembly and Assembly of Evaporator and Drain Pan

Steps	Illustration	Handling instruction
1. Remove the top cover plate.		<ul style="list-style-type: none"> ● Loosen the fixing screws around the top cover plate with a screwdriver. ● Remove the top cover plate from the frontage of the unit.
2. Remove the lower cover board 1.		<ul style="list-style-type: none"> ● Loosen the fixing screws around the lower cover board with a screwdriver.. ● Remove the lower cover board from the frontage of the unit.
3. Remove the lower cover board 2.		<ul style="list-style-type: none"> ● Loosen the connecting screws between the collector tube and the lower cover board. ● Loosen the fixing screws on right of the lower cover board. ● Remove the lower cover board from the frontage of the unit.
4. Remove the mounting plate of the water tray.		<ul style="list-style-type: none"> ● Loosen the screws on both side of the mounting plate of the water tray with a screwdriver. ● Remove the mounting plate of the water tray from the assy.

<p>5. Remove the water tray assy.</p>		<ul style="list-style-type: none"> ● Remove the water tray assy from the unit.
<p>6. Remove the assistive water tray.</p>		<ul style="list-style-type: none"> ● Remove the assistive water tray from the left of the unit. ● If only the assistive water tray needs to be changed, it can be changed upon this step of removal. And it can be installed according to the above steps.
<p>7. Remove the evaporator sub-assy.</p>		<ul style="list-style-type: none"> ● Remove the evaporator sub-assy from the topside of the main water tray. ● Install the unit according to the previous steps. ● After changing the evaporator sub-assy or main water tray, install the unit according to the above steps.

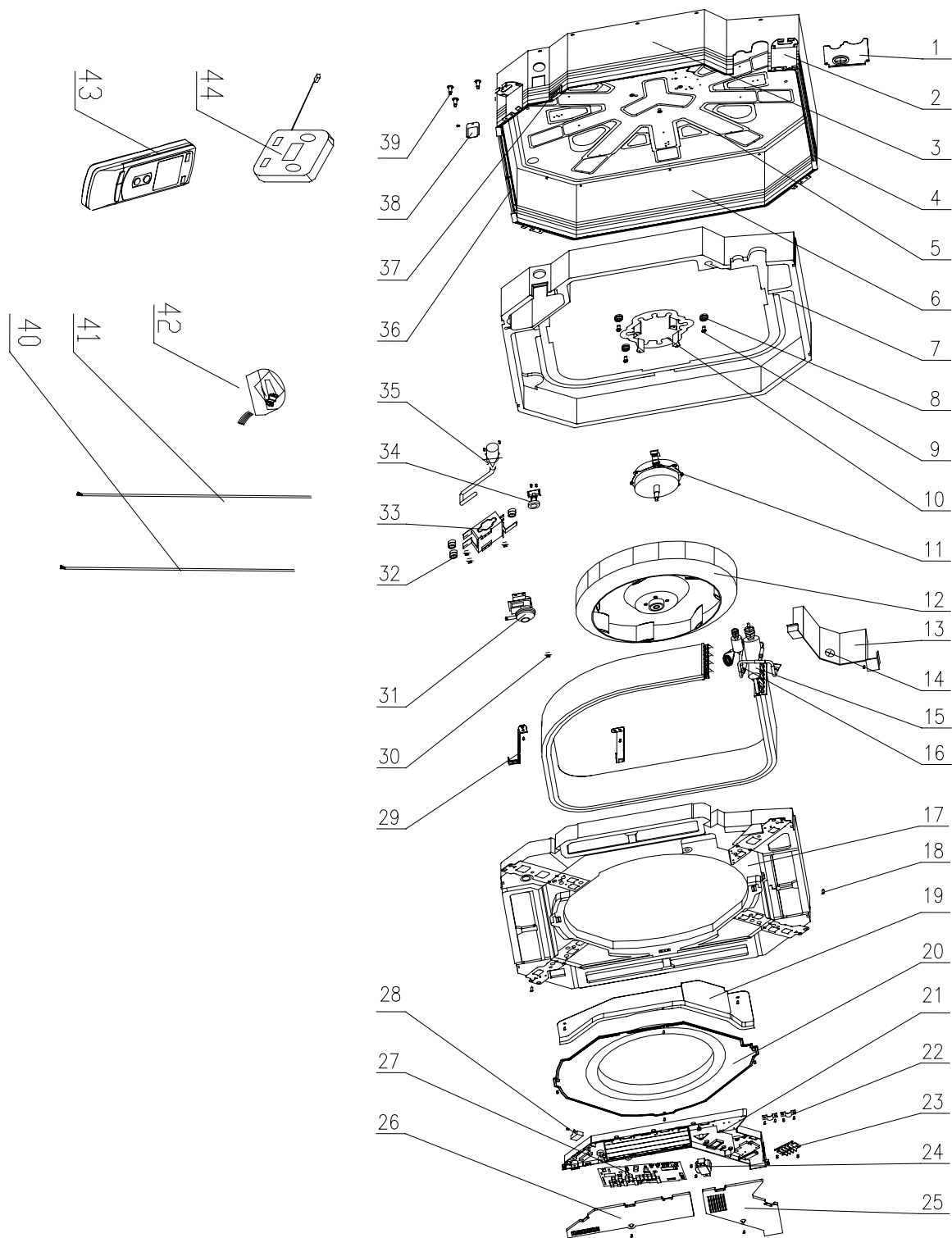
4.5.4 Disassembly and Assembly of Filter

Steps	Illustration	Handling instruction
1. Remove the mounting plate of the filter		<ul style="list-style-type: none"> ● Loosen the fixing screws of the mounting plate of the filter with a screwdriver. ● Remove the mounting plate of the filter from the frontage of the unit.
2. Remove the filter		<ul style="list-style-type: none"> ● Remove the filter from the frontage of the unit. ● After changing the filter, install the unit according to the previous steps.

5 EXPLODED VIEWS AND PART LIST

5.1 Four-way Cassette Type

- Exploded View of GMV-R28T/Na-D, GMV-R36T/Na-D, GMV-R56T/Na-D, GMV-R71T/Na-D.

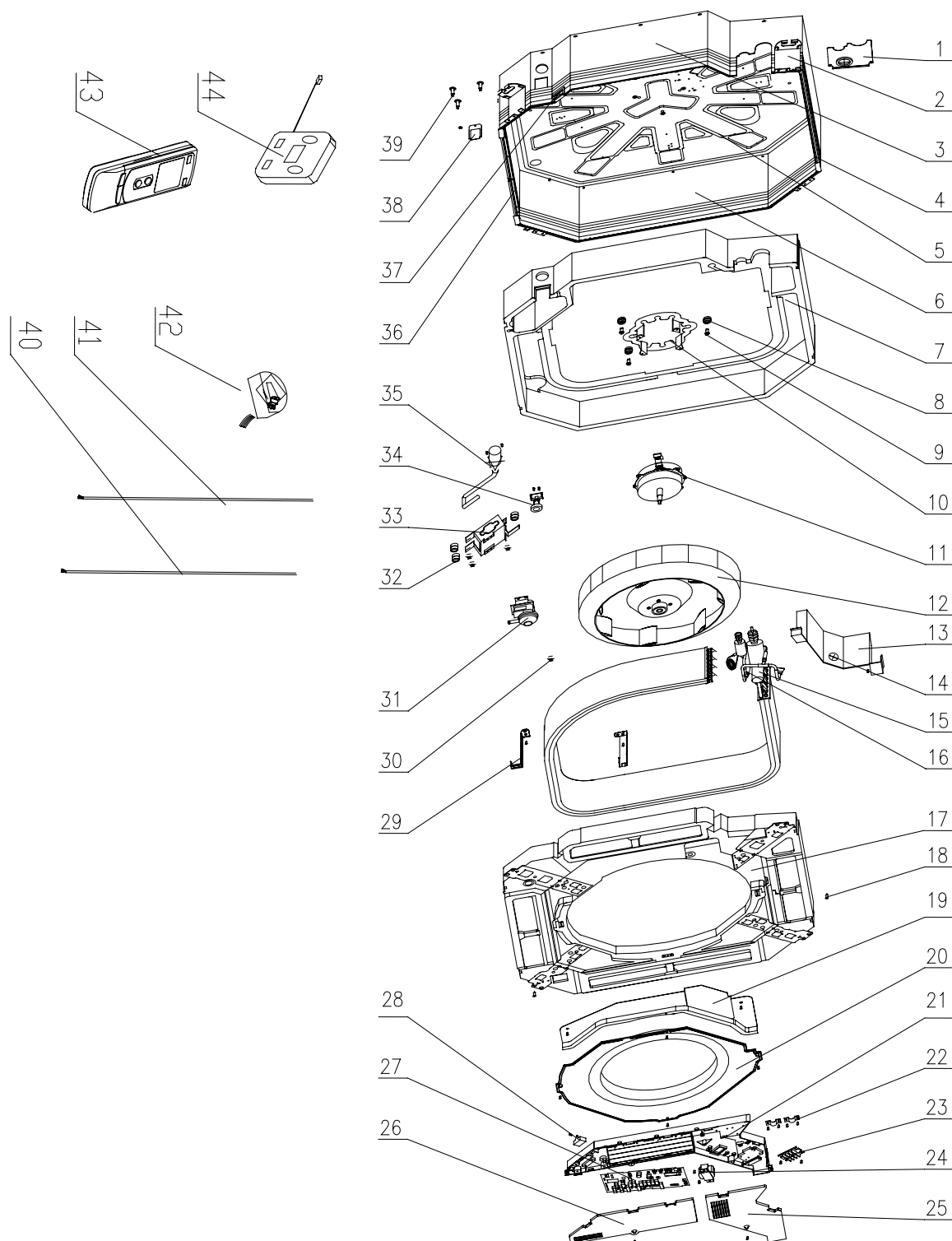


● Parts List of GMV-R28T/Na-D for CM500N0180,GMV-R36T/Na-D for CM500N0190,GMV-R56T/Na-D for CM500N0200,GMV-R71T/Na-D for CM500N0210.

No.	Part Name	GMV-R28T/Na-D	GMV-R36T/Na-D	Qty.
		Code	Code	
1	Tube Exit Plate	01382710	01382710	1
2	Body Fixed Plate	01332701	01332701	4
3	Front Side Plate	01302717	01302717	1
4	Left Side Plate	01302740	01302740	1
5	Base Plate	01222702	01222702	1
6	Rear Side Plate	01302719	01302719	1
7	Bottom Foam	52012716	52012716	1
8	Motor Gasket	76712711	76712711	4
9	Bolt	70210051	70210051	4
10	Motor Fixer	01702701	01702701	1
11	Motor	15704901	15704901	1
12	Centrifugal Fan	10312721	10312721	1
13	Evaporator Connection	01072004	01072004	1
14	Cable-cross Loop	76513101	76513101	2
15	Evaporator Plate	0102422401	01024224	1
16	Electronic Expansile Valve	07334281	07334281	1
17	Water Tray	12412701	12412701	1
18	Screw	70140032	70140032	4
19	Electric Box Base Plate	01412721	01412721	1
20	Flow Guide Loop	10372701	10372701	1
21	Electric Box	20102701	20102701	1
22	Wire Clamp	71010102	71010102	2
23	Terminal Board	42011222	42011222	1
24	Transformer	43110233	43110233	1
25	Electric Box Cover I	20102702	20102702	1
26	Electric Box Cover II	20102703	20102703	1
27	Main PCB	30226315	30226315	1
28	Capacitor	33010027	33010027	1
29	Evaporator Support	01072003	01072003	2
30	Nut with Washer M6	70310012	70310012	4
31	Pipe Pump PJV-1415	43130324	43130324	1
32	Pump Gasket	76712702	76712702	3
33	Pump Support	01332001	01332001	1
34	Water Level Switch	45010201	45010201	1
35	Drainage Pipe Pump	05232721	05232721	1
36	Right Side Plate	01302710	01302710	1
37	Cable-cross Loop	76512702	76512702	1
38	Pump Cover	01252710	01252710	1
39	Bolt	70212711	70212711	4
40	Signal Cable	4001039509	4001039509	1
41	Connecting Wire	40010232	40010232	1
42	Magnet Coil for Electronic Expansion Valve	43040001	43040001	1
43	Remote Controller	305125063	305125063	1
44	Display Board	30296309	30296309	1

No.	Part Name	GMV-R56T/Na-D	GMV-R71T/Na-D	Qty.
		Code	Code	
1	Tube Exit Plate	01382711	01382711	1
2	Body Fixed Plate	01332701	01332701	4
3	Front Side Plate	01302718	01302718	1
4	Left Side Plate	01302715	01302715	1
5	Base Plate	01222702	01222702	1
6	Rear Side Plate	01302714	01302714	1
7	Bottom Foam	52012711	52012711	1
8	Motor Gasket	76712711	76712711	4
9	Bolt	70210051	70210051	4
10	Motor Fixer	01702701	01702701	1
11	Motor	15704902	15704902	1
12	Centrifugal Fan	10312705	10312705	1
13	Evaporator Connection	01072710	01072710	1
14	Cable-cross Loop	76513101	76513101	2
15	Evaporator Plate	01024225	01024225	1
16	Electronic Expansile Valve	07334283	07334283	1
17	Water Tray	12412701	12412701	1
18	Screw	70140032	70140032	4
19	Electric Box Base Plate	01412721	01412721	1
20	Flow Guide Loop	10372701	10372701	1
21	Electric Box	20102701	20102701	1
22	Wire Clamp	71010102	71010102	2
23	Terminal Board	42011222	42011222	1
24	Transformer	43110233	43110233	1
25	Electric Box Cover I	20102702	20102702	1
26	Electric Box Cover II	20102703	20102703	1
27	Main PCB	30226315	30226315	1
28	Capacitor	33010010	33010010	1
29	Evaporator Support	01072715	01072715	2
30	Nut with Washer M6	70310012	70310012	4
31	Pipe Pump PJV-1415	43130324	43130324	1
32	Pump Gasket	76712702	76712702	3
33	Pump Support	01329416	01329416	1
34	Water Level Switch	45010201	45010201	1
35	Drainage Pipe Pump	05230026	05230026	1
36	Right Side Plate	01302716	01302716	1
37	Cable-cross Loop	76512702	76512702	1
38	Pump Cover	01252711	01252711	1
39	Bolt	70212711	70212711	4
40	Signal Cable	4001039509	4001039509	1
41	Connecting Wire	40010232	40010232	1
42	Magnet Coil for Electronic Expansion Valve	43040001	43040001	1
43	Remote Controller	305125063	305125063	1
44	Display Board	30296309	30296309	1

- Exploded View of GMV-R90T/Na-D, GMV-R112T/Na-D, GMV-R125T/Na-D, GMV-R140T/Na-D.



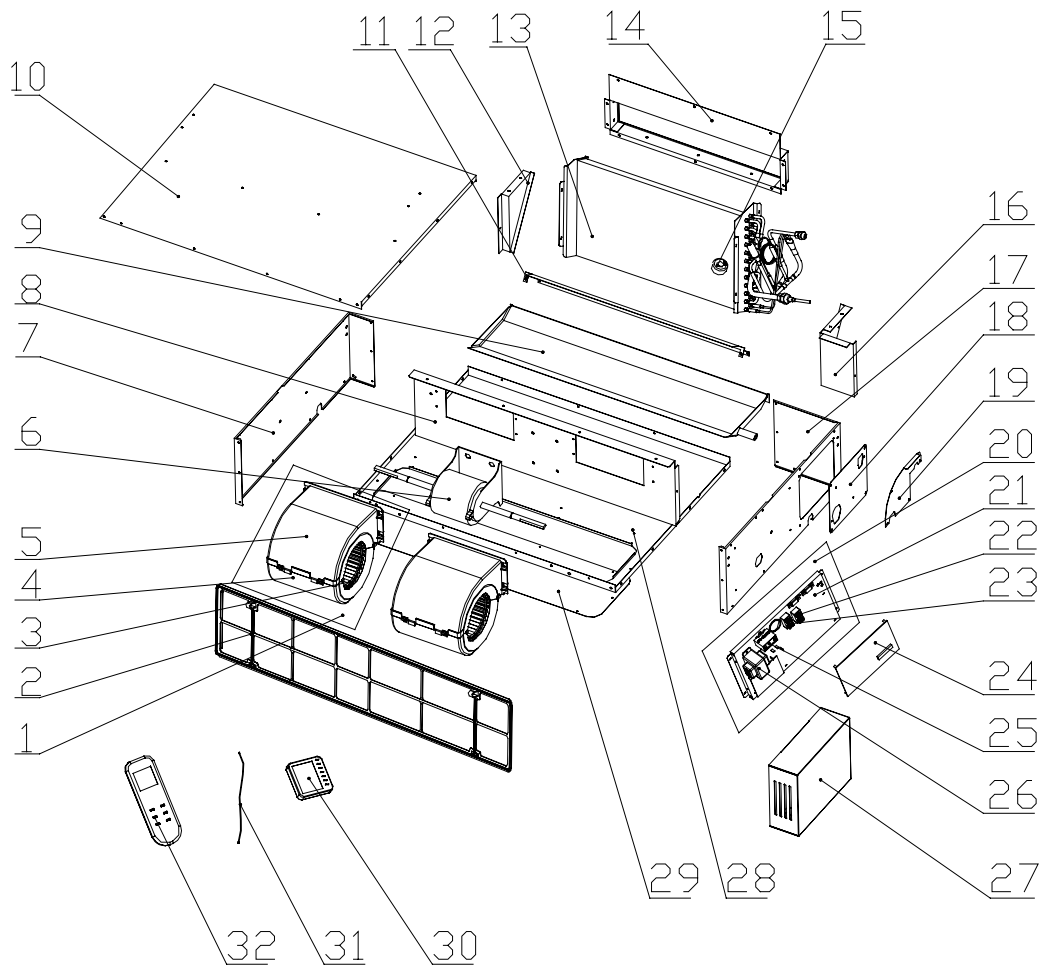
● Parts List of GMV-R90T/Na-D for CM500N0220,GMV-R112T/Na-D for CM500N0230,GMV-R125T/Na-D for CM500N0240,GMV-R140T/Na-D for CM500N0320.

No.	Part Name	GMV-R90T/Na-D	GMV-R112T/Na-D	Qty.
		Code	Code	
1	Tube Exit Plate	01382711	01382711	1
2	Body Fixed Plate	01332701	01332701	4
3	Front Side Plate	01302713	01302713	1
4	Left Side Plate	01302711	01302711	1
5	Base Plate	01222702	01222702	1
6	Rear Side Plate	01302709	01302709	1
7	Bottom Foam	52012717	52012717	1
8	Motor Gasket	76712711	76712711	4
9	Bolt	70210051	70210051	4
10	Motor Fixer	01702701	01702701	1
11	Motor	1501271501	1501271501	1
12	Centrifugal Fan	10310101	10310101	1
13	Evaporator Connection	01072733	01072733	1
14	Cable-cross Loop	76515202	76515202	2
15	Evaporator Plate	01024612	01024612	1
16	Electronic Expansile Valve	07330001	07330001	1
17	Water Tray	12412701	12412701	1
18	Screw	70140032	70140032	4
19	Electric Box Base Plate	01412721	01412721	1
20	Flow Guide Loop	10372722	10372722	1
21	Electric Box	20102701	20102701	1
22	Wire Clamp	71010102	71010102	2
23	Terminal Board	42011222	42011222	1
24	Transformer	43110233	43110233	1
25	Electric Box Cover I	20102702	20102702	1
26	Electric Box Cover II	20102703	20102703	1
27	Main PCB	30226315	30226315	1
28	Capacitor	33010012	33010012	1
29	Evaporator Support	01072708	01072708	2
30	Nut with Washer M6	70310012	70310012	4
31	Pipe Pump PJV-1415	43130324	43130324	1
32	Pump Gasket	76712702	76712702	3
33	Pump Support	01332721	01332721	1
34	Water Level Switch	45010201	45010201	1
35	Drainage Pipe Pump	05230026	05230026	1
36	Right Side Plate	01302712	01302712	1
37	Cable-cross Loop	76512702	76512702	1
38	Pump Cover	01252711	01252711	1
39	Bolt	70210051	70210051	4
40	Signal Cable	4001039509	4001039509	1
41	Connecting Wire	40010232	40010232	1
42	Magnet Coil for Electronic Expansion Valve	43040001	43040001	1
43	Remote Controller	305125063	305125063	1
44	Display Board	30296309	30296309	1

No.	Part Name	GMV-R125T/Na-D	GMV-R140T/Na-D	Qty.
		Code	Code	
1	Tube Exit Plate	01382711	01382711	1
2	Body Fixed Plate	01332701	01332701	4
3	Front Side Plate	01302713	01302713	1
4	Left Side Plate	01302711	01302711	1
5	Base Plate	01222702	01222702	1
6	Rear Side Plate	01302709	01302709	1
7	Bottom Foam	52012717	52012717	1
8	Motor Gasket	76712711	76712711	4
9	Bolt	70210051	70210051	4
10	Motor Fixer	01702701	01702701	1
11	Motor	1501271501	1501271501	1
12	Centrifugal Fan	10310101	10310101	1
13	Evaporator Connection	01072733	01072733	1
14	Cable-cross Loop	76515202	76515202	2
15	Evaporator Plate	01024612	01024612	1
16	Electronic Expansile Valve	07330001	07330001	1
17	Water Tray	12412701	12412701	1
18	Screw	70140032	70140032	4
19	Electric Box Base Plate	01412721	01412721	1
20	Flow Guide Loop	10372722	10372722	1
21	Electric Box	20102701	20102701	1
22	Wire Clamp	71010102	71010102	2
23	Terminal Board	42011222	42011222	1
24	Transformer	43110233	43110233	1
25	Electric Box Cover I	20102702	20102702	1
26	Electric Box Cover II	20102703	20102703	1
27	Main PCB	30226315	30226315	1
28	Capacitor	33010012	33010012	1
29	Evaporator Support	01072708	01072708	2
30	Nut with Washer M6	70310012	70310012	4
31	Pipe Pump PJV-1415	43130324	43130324	1
32	Pump Gasket	76712702	76712702	3
33	Pump Support	01332721	01332721	1
34	Water Level Switch	45010201	45010201	1
35	Drainage Pipe Pump	05230026	05230026	1
36	Right Side Plate	01302712	01302712	1
37	Cable-cross Loop	76512702	76512702	1
38	Pump Cover	01252711	01252711	1
39	Bolt	70210051	70210051	4
40	Signal Cable	4001039509	4001039509	1
41	Connecting Wire	40010232	40010232	1
42	Magnet Coil for Electronic Expansion Valve	43040001	43040001	1
43	Remote Controller	305125063	305125063	1
44	Display Board	30296309	30296309	1

5.2 Air Duct Type

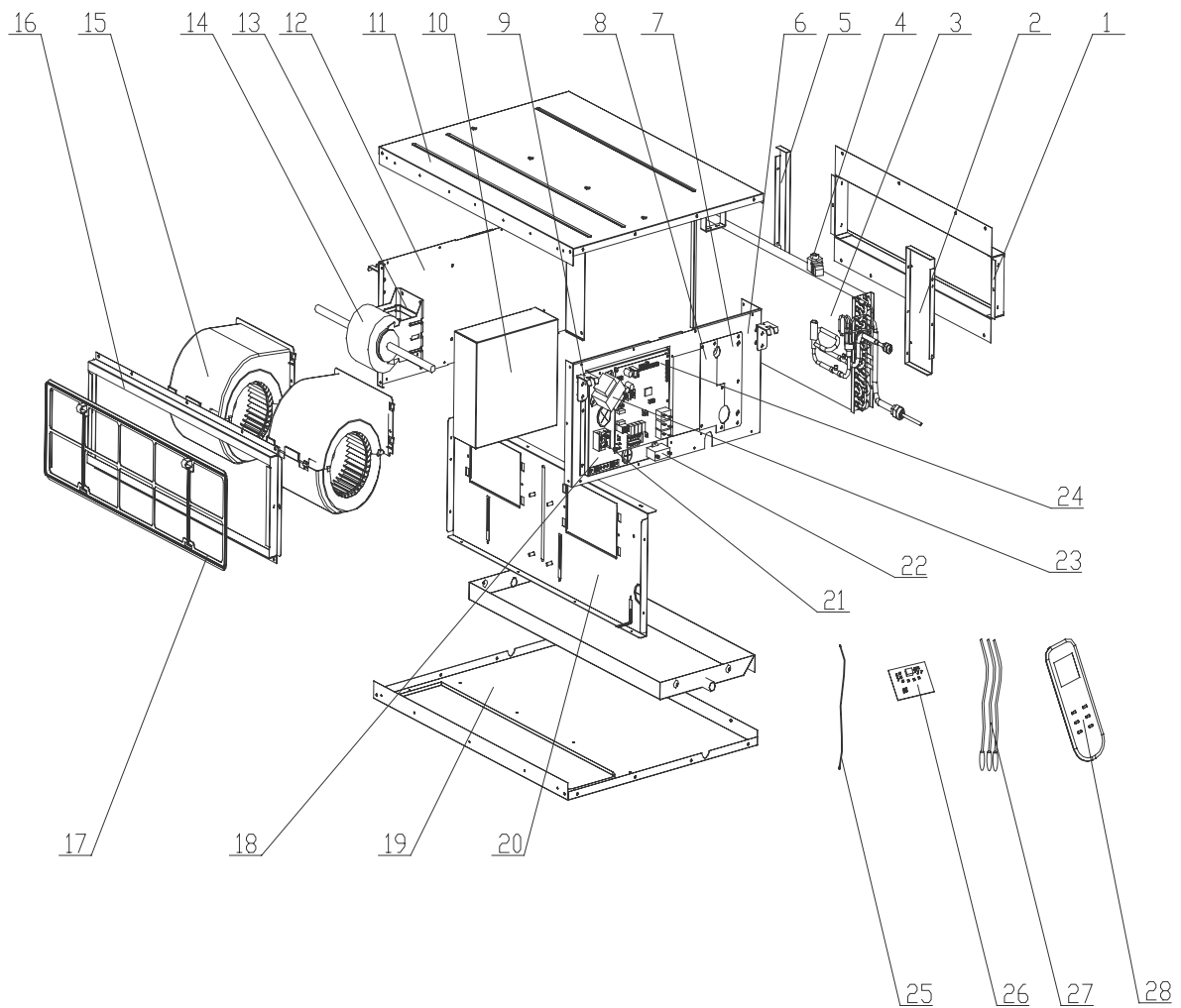
- Exploded View of GMV-R22P/NaB-D, GMV-R28P/NaB-D, GMV-R36P/NaB-D



● Parts List of GMV-R22P/NaB-D for CM800N0760,GMV-R28P/NaB-D for CM800N0770,GMV-R36P/NaB-D for CM800N0780.

No.	Part Name	GMV-R22P/NaB-D	GMV-R28P/NaB-D	GMV-R36P/NaB-D	Qty.
		Part Code	Part Code	Part Code	
1	Motor Sub-Assy	150024011	150024011	150024011	2
2	Filter Sub-Assy	11725202	11725202	11725202	1
3	Centrifugal fan	10319051	10319051	10319051	1
4	Front volute casing	22202030	22202030	22202030	1
5	Propeller Housing	22202029	22202029	22202029	1
6	Fan Motor	1570520103	1570520201	1570520201	1
7	Right Side Plate Assy	01314175	01314175	01314175	1
8	Fan Motor Mounting Plate Sub-Assy	01324341	01324341	01324341	1
9	Water Tray Assy	01284153	01284153	01284153	1
10	Top Cover Board Assy	01264176	01264176	01264176	1
11	Evaporator Sub-Assy	01054124	01054123	01054123	1
12	Right Evaporator Support	01094121	01094121	01094121	1
13	Evaporator Assy	01024231	01024230	01024232	1
14	Air intake side-board Sub-assy	01494118	01494118	01494118	1
15	Electric expand valve fitting	43040001	43040001	43040001	1
16	Left Evaporator Support	01094122	01094122	01094122	1
17	Left Side Plate Assy	01314172	01314172	01314172	1
18	Seal Of Left Side Plate Sub-Assy	01494115	01494115	01494115	1
19	Seal Of Connection Pipe	01494132	01494132	01494132	1
20	Electric Box Assy	01394990	01394990	01394990	1
21	Electric Box Sub-Assy	01394978	01394978	01394978	1
22	Terminal Board	/	/	/	/
23	Terminal Board	42011106	42011106	42011106	1
24	Main Board	30226168	30226168	30226168	1
25	Capacitor	33010027	33010027	33010027	1
26	Transformer	43110237	43110237	43110237	1
27	Electric Box Cover	01424319	01424319	01424319	1
28	Lower Cover Plate Sub-Assy	01264178	01264178	01264178	1
29	Cover Of Air-In	01259056	01259056	01259056	1
30	Display Board	30296014	30296014	30296014	1
31	Connecting Wire	40010232	40010232	40010232	1
32	Remote Controller	305125063	305125063	305125063	1

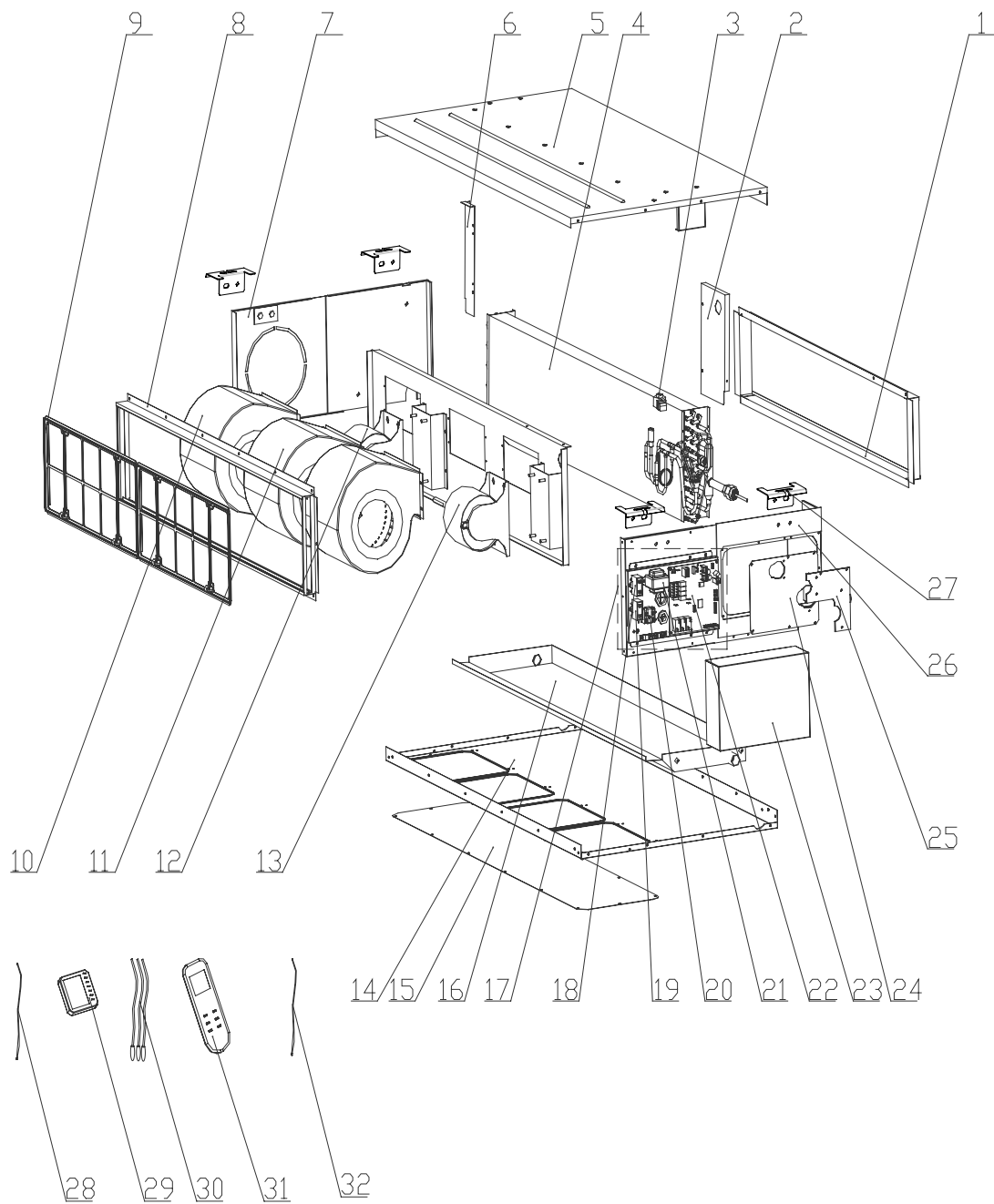
- Exploded View of GMV-R56P/NaB-D, GMV-R71P/NaB-D.



● Parts List of GMV-R56P/NaB-D for CM800N0790,GMV-R71P/NaB-D for CM800N0800.

No.	Part Name	GMV-R56P/NaB-D	GMV-R71P/NaB-D	Qty.
		Part Code	Part Code	
1	Side Plate of Air outlet	01499074	01499074	1
2	Left Support of Evaporator	01078603	01078603	1
3	Evaporator Assy	01024221	01024221	1
4	Electric expand valve fitting	43040001	43040001	1
5	Right Support of Evaporator	01078604	01078604	1
6	Left Side Plate assy	01315255	01315255	1
7	Seal of left Side Plate Sub-Assy	01308680	01308680	1
8	Seal of left Connection Pipe	01498610	01498610	1
9	Hook	02112466	02112466	4
10	Electric Box Cover	01425249	01425249	1
11	Top Cover Board Assy	01258652	01258652	1
12	Right Side Plate Assy	01308677	01308677	1
13	Motor Support	01708501	01708501	1
14	Fan Motor	1570521101	1570521101	1
15	Motor Sub	15018603	15018603	1
16	Side Plate of Air outlet	01498612	01498612	1
17	Filter	11129066	11129066	1
18	Electric box	01424190	01424190	1
19	Lower Cover Plate Sub-assy	01258612	01258612	1
20	Fan Motor Mounting Plate Sub-Assy	01338631	01338631	1
21	Terminal Board	42011106	42011106	1
22	Capacitor	33010009	33010009	1
23	Transformer	43110239	43110239	1
24	Main Board	30226168	30226168	1
25	Connecting Wire	40010232	40010232	1
26	Display Board	30296014	30296014	1
27	Sensor sub-assy	39004167G	39004167G	1
28	Remote Controller	305125063	305125063	1

- Exploded View of GMV-R90P/NaB-D, GMV-R112P/NaB-D, GMV-R140P/NaB-D.

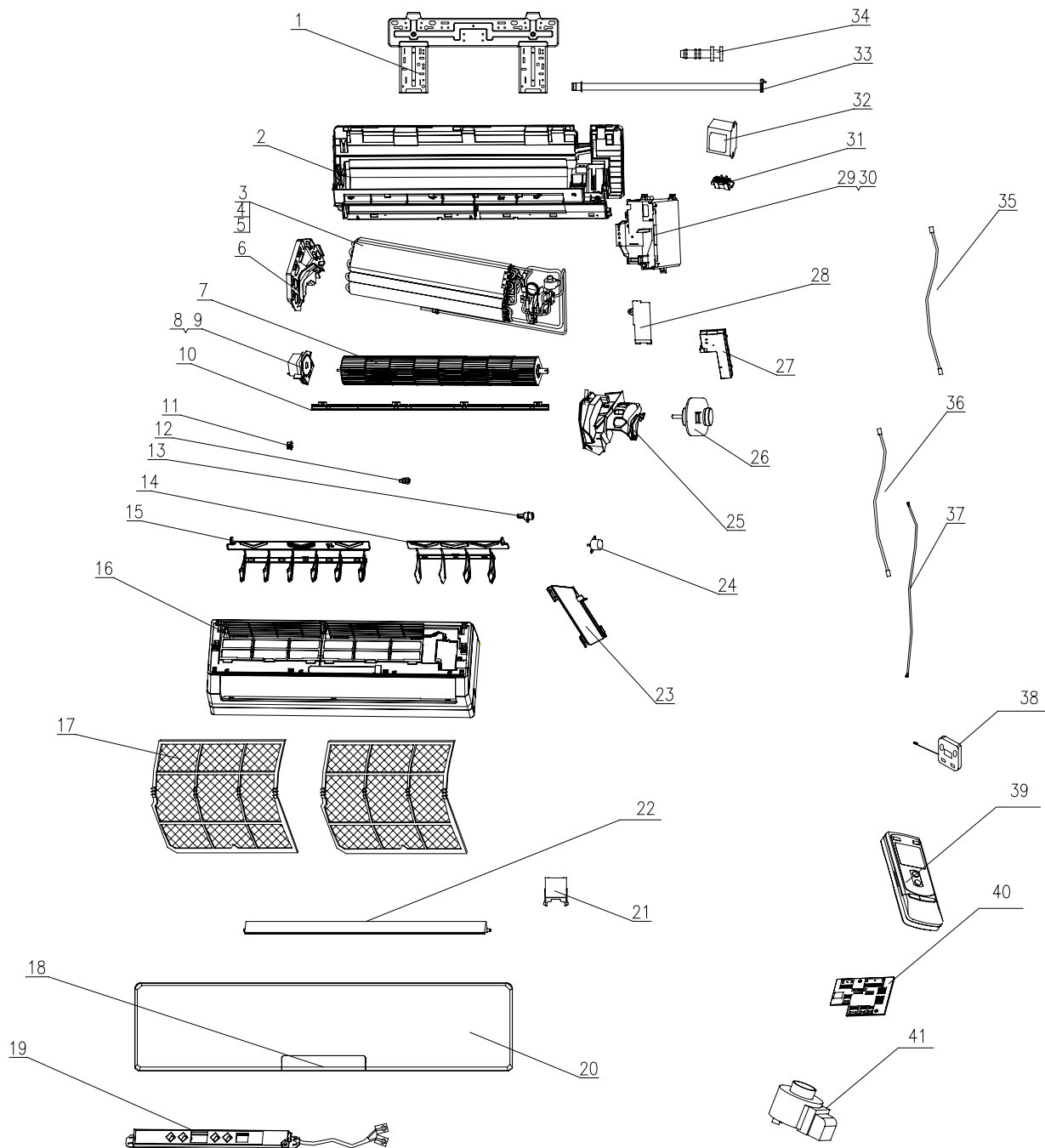


● Parts List of GMV-R90P/NaB-D for CM800N0810, GMV-R112P/NaB-D for CM800N0820, GMV-R140P/NaB-D for CM800N0830.

NO.	Name	GMV-R90P/NaB-D	GMV-R112P/NaB-D	GMV-R140P/NaB-D	Qty
		Code	Code	Code	
1	Air Outlet Side Board Assy	01498608	01498608	01498608	1
2	Left Support of Evaporator Sub-Assy	01805279	01805279	01805279	1
3	Electric expand valve fitting	43040001	43040001	43040001	1
4	Evaporator Assy	01024222	01024222	01024218	1
5	Top Cover Board Assy	01258607	01258607	01258607	1
6	Right Support of Evaporator	01078604	01078604	01078604	1
7	Right Side Plate Assy	01308679	01308679	01308679	1
8	Air intake side-board Sub-assy	01499066	01499066	01499066	1
9	Filter Sub-Assy	11129062	11129062	11129062	1
10	Motor	15018603	15018603	15018603	2
11	Motor	15018604	15018604	15018604	1
12	Fan Motor	1570521101	1570521101	1570521001	1
13	Fan Motor	1570521201	1570521201	1570520901	1
14	Bottom Cover Plate Assy	01258603	01258603	01258603	1
15	Cover of Air-in	01258602	01258602	01258602	1
16	Water Tray Assy	01278603	01278603	01278603	1
17	Electric Box Assy	01395004	01395004	01395004	1
18	Capacitor CBB61	33010064	33010064	33010064	1
19	Capacitor CBB61	33010009	33010009	33010009	1
20	Terminal Board	42011106	42011106	42011106	1
21	Transformer	43110239	43110239	43110239	1
22	Main Board	30226168	30226168	30226168	1
23	Electric Box Coveer	01425249	01425249	01425249	1
24	Seal of Left Side Plate Sub-Assy	01308672	01308672	01308672	1
25	Seal of Connection Pipe	01498601	01498601	01498601	1
26	Left Side Plate Assy	01315255	01315255	01315255	1
27	Hook	02118504	02118504	02118504	4
28	Connecting Wire	40010232	40010232	40010232	1
29	Display Board	30296014	30296014	30296014	1
30	Sensor Sub-Assy	39004167G	39004167G	39004167G	1
31	Remote Controller	305125063	305125063	305125063	1
32	Connecting Wire	4001039509	4001039509	4001039509	1

5.3 Wall Mounted Type

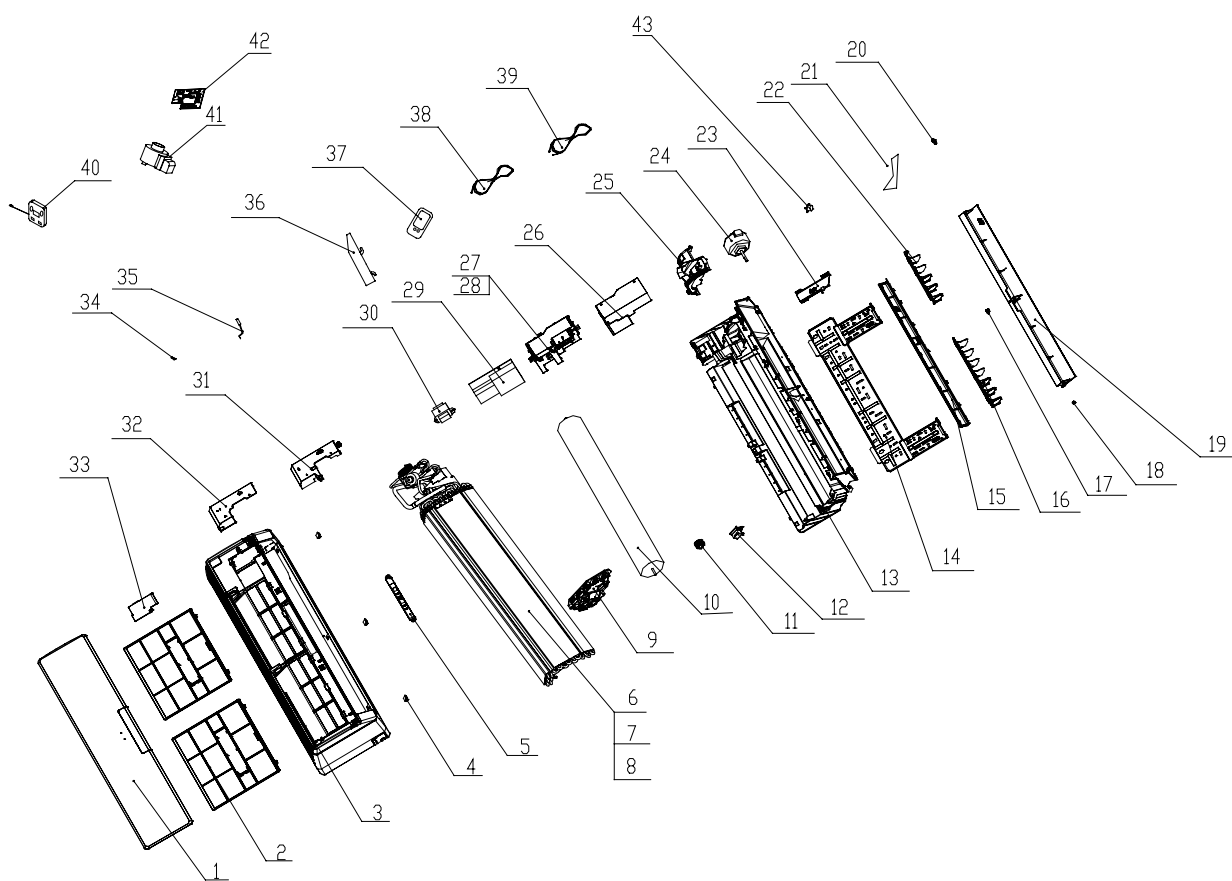
- Exploded View of GMV-R22G/NaG-D, GMV-R28G/NaG-D.



● Parts List of GMV-R22G/NaG-D for CM100N0230, GMV-R28G/NaG-D for CM100N0250.

NO.	Name	GMV-R22G/NaG-D, GMV-R28G/NaG-D	
		Code	Qty
1	Wall Mounting Frame	01252021	1
2	Rear Case assy	26904260	1
3	Evaporator Assy	01024249	1
4	Electric Expansion Valve Sub-Assy	07334373	1
5	Electronic Expansion Valve	07334281	1
6	Evaporator Support	24212091	1
7	Cross Flow Fan	10454101	1
8	Ring of Bearing	26152022	1
9	O-Gasket of Cross Fan Bearing	76512203	1
10	Helicoid tongue	26112163	1
11	Left Axile Bush	10512037	1
12	Crank	10582070	1
13	Axile Bush	10542008	1
14	Air Louver 1	10512156	1
15	Air Louver 2	10512155	1
16	Front Case Sub-Assy	20012139	1
17	Filter Sub-Assy	1112220401	2
18	Receiver Window	22432230	1
19	Display Board	30565007	1
20	Front panel	20012122S	1
21	Screw Cover	24252016	1
22	Guide Louver	10512157	1
23	Pipe Clamp	26112164	1
24	Step Motor	1521212901	1
25	Motor Press Plate	26112161	1
26	Fan Motor	15012089	1
27	Electric Box Cover 1	20122103	1
28	Electric Box Cover 2	2012207506	1
29	Electric box subassembly	01395015	1
30	Main Board	30226326	1
31	Jumper	4202300121	1
32	Transformer	43110226	1
33	Drainage hose	0523001401	1
34	Rubber Plug (Water Tray)	76712012	1
35	Power Cord	4002048710	1
36	Signal Wire	4001039509	1
37	Signal Wire	40010232	1
38	Display Board	30296309	1
39	Remote Controller	30510041	1
40	Switch Board	30118018	1
41	Electric expand valve fitting	4304000102	1

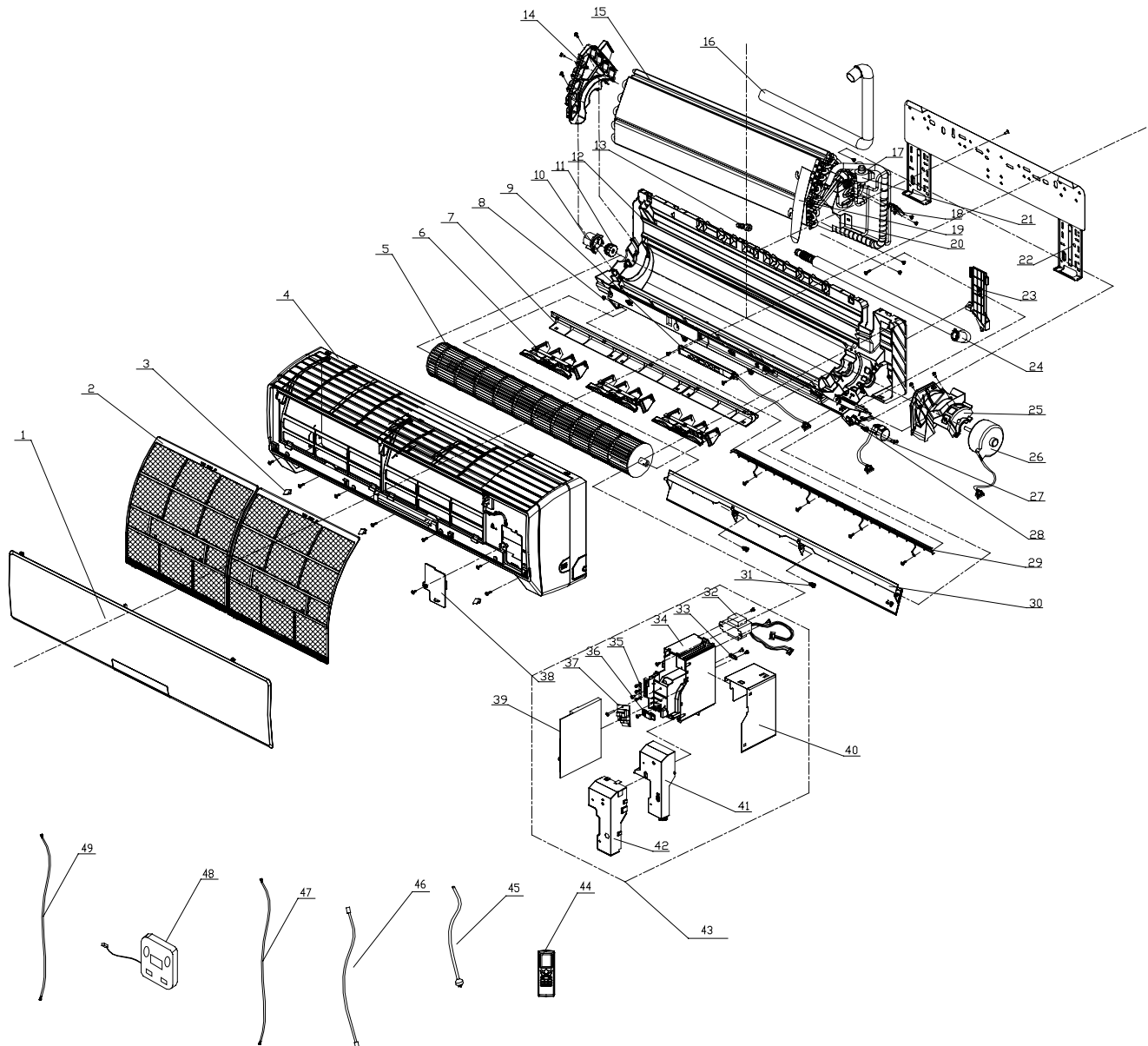
- Exploded View of GMV-R36G/NaG-D, GMV-R45G/NaG-D, GMV-R50G/NaG-D.



● Parts List of GMV-R36G/NaG-D for CM100N0290, GMV-R45G/NaG-D for CM100N0310,GMV-R50G/NaG-D for CM100N0300.

NO.	Name	GMV-R36G/NaG-D GMV-R45G/NaG-D GMV-R50G/NaG-D	
		Code	Qty
1	Front Panel Assy	20012260	1
2	Filter Sub-Assy	1112208901	2
3	Front Case Sub-Assy	20012288	1
4	Screw Cover	24252016	3
5	Display Board	30565038	1
6	Evaporator Assy	01024250	1
7	Electric Expansion Valve Sub-Assy	07334374	1
8	Electronic Expansion Valve	07334283	1
9	Evaporator Support	24212100	1
10	Cross Flow Fan	10454102	1
11	O-Gasket of Cross Fan Bearing	76512203	1
12	O-Gasket sub-assy of Bearing	76512051	1
13	Rear Case assy	26904259	1
14	Wall Mounting Frame	01252218	1
15	Helicoid tongue	26112238	1
16	Air Louver 1	10512116	1
17	Axile Bush	10542008	1
18	Left Axile Bush	10512037	1
19	Guide Louver	10512115	1
20	Crank	10582070	1
21	Drainage hose	05230014	1
22	Air Louver 2	10512117	1
23	Pipe Clamp	26112164	1
24	Fan Motor	1501211601	1
25	Motor Press Plate	26904264	1
26	Lower Shield of Electric Box	01592091	1
27	Electric Box Assy	01394970	1
28	Electric Box	2011210803	1
29	Main Board	30226330	1
30	Transformer	43110237	1
31	Electric Box Cover1	20122128	1
32	Shield cover of Electric Box	01592092	1
33	Electric Box Cover2	2011208104	1
34	Sensor Insert	42020063	3
35	Sensor sub-assy	39008049G	1
36	Water-blocking Sheet	76814105	1
37	Remote Controller	30510041	1
38	Power Cord	4002048710	1
39	Wire of pinboard	4001039509	1
40	Display Board	30296309	1
41	Electric expand valve fitting	4304000102	1
42	Switch Board	30118018	1
43	Step Motor	15012086	1

- Exploded View of GMV-R56G/NaG-D, GMV-R63G/NaG-D, GMV-R71G/NaG-D.

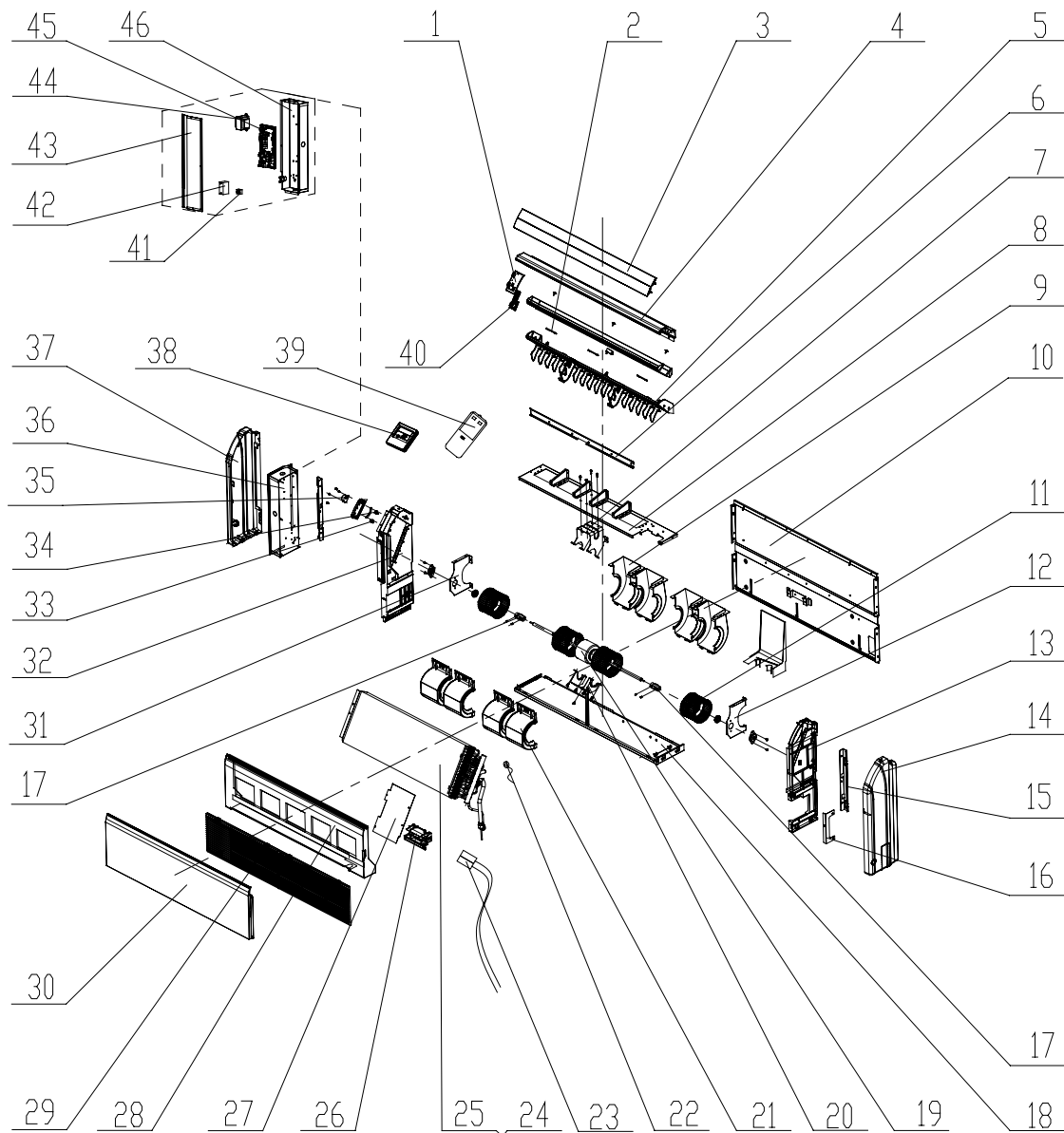


● Parts List of GMV-R56G/NaG-D for CM100N0360, GMV-R63G/NaG-D for CM100N0370,GMV-R71G/NaG-D for CM100N0350.

NO.	Name	GMV-R56G/NaG-D GMV-R63G/NaG-D GMV-R71G/NaG-D	
		Code	Qty
1	Front Panel Case	20012328	1
2	Filter Sub-Assy	11122091	2
3	Screw Cover	24252016	3
4	Front Case	20012295	1
5	Cross Flow Fan	10454103	1
6	Air Louver 1	10512159	3
7	Helicoid tongue	26112187	1
8	Left Axile Bush	10512037	1
9	Display Board	30565038	1
10	Ring of Bearing	26152025	1
11	O-Gasket of Cross Fan Bearing	76512203	1
12	Rear Case assy	26904258	1
13	Rubber Plug (Water Tray)	76712012	1
14	Evaporator Support	24212103	1
15	Evaporator Assy	01024251	1
16	Thermal Insulation Tube	75080005	0.7m
17	Electric Expansion Valve Sub-Assy	07334386	1
18	Elbow Protect Board	01072493	1
19	Water-blocking Sheet	76814104	1
20	Air Guard	01354124P	1
21	Electric expand valve fitting	4304000102	1
22	Wall-Mounting Frame	01252004	1
23	Pipe Clamp	26112188	1
24	Drainage hose	0523001405	1
25	Motor Press Plate	26112184	1
26	Fan Motor	1501209801	1
27	Step Motor	1521300101	1
28	Crank	10582070	1
29	Rear Grill	/	/
30	Guide Louver	10512118	1
31	Axile Bush	10542008	2
32	Transformer	43110237	1
33	Switch Board	30118018	1
34	Electric Box Cover1	2011208104	1
35	Main Board	30226256	1
36	Lower Shield of Electric Box	01592091	1
37	Electric Box Cover1	20122128	1
38	Upper Shield of Electric Box	01592092	1
39	Electric Box Assy	01395068	1
40	Remote Controller	30510041	1
41	Power Cord	4002048710	1
42	Signal Wire	40010232	1
43	Signal Wire	4001039509	1
44	Display Board	30296309	1
45	Sensor sub-assy	39008049G	1

5.4 Floor Ceiling Type

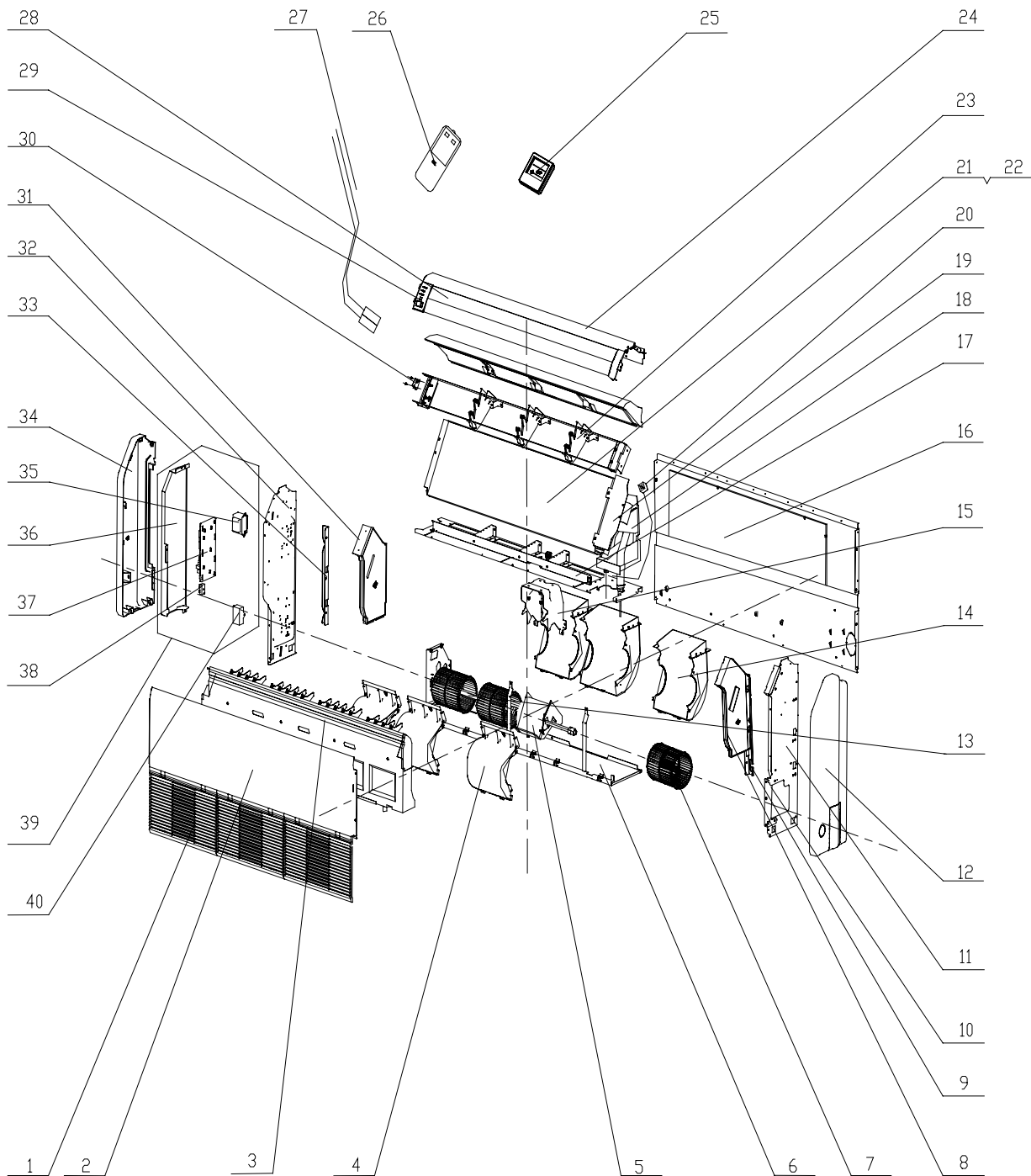
- Exploded View of GMV-R28Zd/NaB-D, GMV-R36Zd/NaB-D, GMV-R50Zd/NaB-D.



- Parts List of GMV-R28Zd/NaB-D for CM600N0230 , GMV-R36Zd/NaB-D for CM600N0240 , GMV-R50Zd/NaB-D for CM600N0250 .

NO.	Name	GMV-R28Zd/NaB-D	GMV-R36Zd/NaB-D	GMV-R50Zd/NaB-D	Qty
		Code	Code	Code	
1	Fixed Mount	26909426R	26909426R	26909426R	1
2	Louver Clamp	26112127	26112127	26112127	2
3	Guide Louver	10619403	10619403	10619403	2
4	Front Connecting Plate	01349414P	01349414P	01349414P	1
5	Base Frame	26909448	26909448	26909448	1
6	Air Lead Plate sub-assy	02229418	02229418	02229418	1
7	Supporter	01805288	01805288	01805288	1
8	Mid-clapboard sub-assy	01249416	01249416	01249416	1
9	Front volute casing	26905205	26905205	26905205	4
10	Rear side plate assy	01319430	01319430	01319430	1
11	Centrifugal fan	10425200	10425200	10425200	4
12	Support 1	01809417	01809417	01809417	1
13	Right Side Plate Sub-Assy	01319429	01319429	01319429	1
14	Right Cover Plate	26909444	26909444	26909444	1
15	Installation Supporting Frame	01809402	01809402	01809402	1
16	Connection Board	02229406	02229406	02229406	1
17	Joint Slack	73018731	73018731	73018731	2
18	Rear Connecting Plate	01349416	01349416	01349416	1
19	Fan Motor	1570940901	1570940901	15704111	1
20	Bar Clasp Sub-assy	70815201	70815201	70815201	1
21	Rear volute casing	26905206	26905206	26905206	4
22	Electric expand valve fitting	4304000101	4304000101	4304000101	1
23	Sensor Sub-assy	39008073	39008073	39008073	1
24	Evaporator Assy	01024294	01024298	01024293	1
25	Electronic Expansion Valve	07334281	07334281	07334281	1
26	Press Plate of Water Lead flume	26909442	26909442	26909442	1
27	Connection Board	01344115	01344115	01344115	1
28	Water Tray Assy	01289404	01289404	01289404	1
29	Front Grill sub-assy	01579403	01579403	01579403	2
30	Top Cover Board Sub-assy	01269409	01269409	01269409	1
31	Support 2	01809418	01809418	01809418	1
32	Left Side Plate Sub-Assy	0131942801	0131942801	0131942801	1
33	Rotating Shaft	26909412	26909412	26909412	1
34	Rotating Shaft	26909413	26909413	26909413	1
35	Step Motor	1521240206	1521240206	1521240206	1
36	Electric Box Assy	01395152	01395152	01395140	1
37	Left Cover Plate	26909443	26909443	26909443	1
38	Display Board	30296309	30296309	30296309	1
39	Remote Controller	30510041	30510041	30510041	1
40	Display Board	30294220	30294220	30294220	1
41	Terminal Board	42011106	42011106	42011106	1
42	Capacitor CBB61	33010089	33010089	33010026	1
43	Electric Box Cover	01429420	01429420	01429420	1
44	Transformer	4311023701	4311023701	4311023701	1
45	Main Board	30226910	30226910	30226910	1
46	Electric Box	01429419	01429419	01429419	1

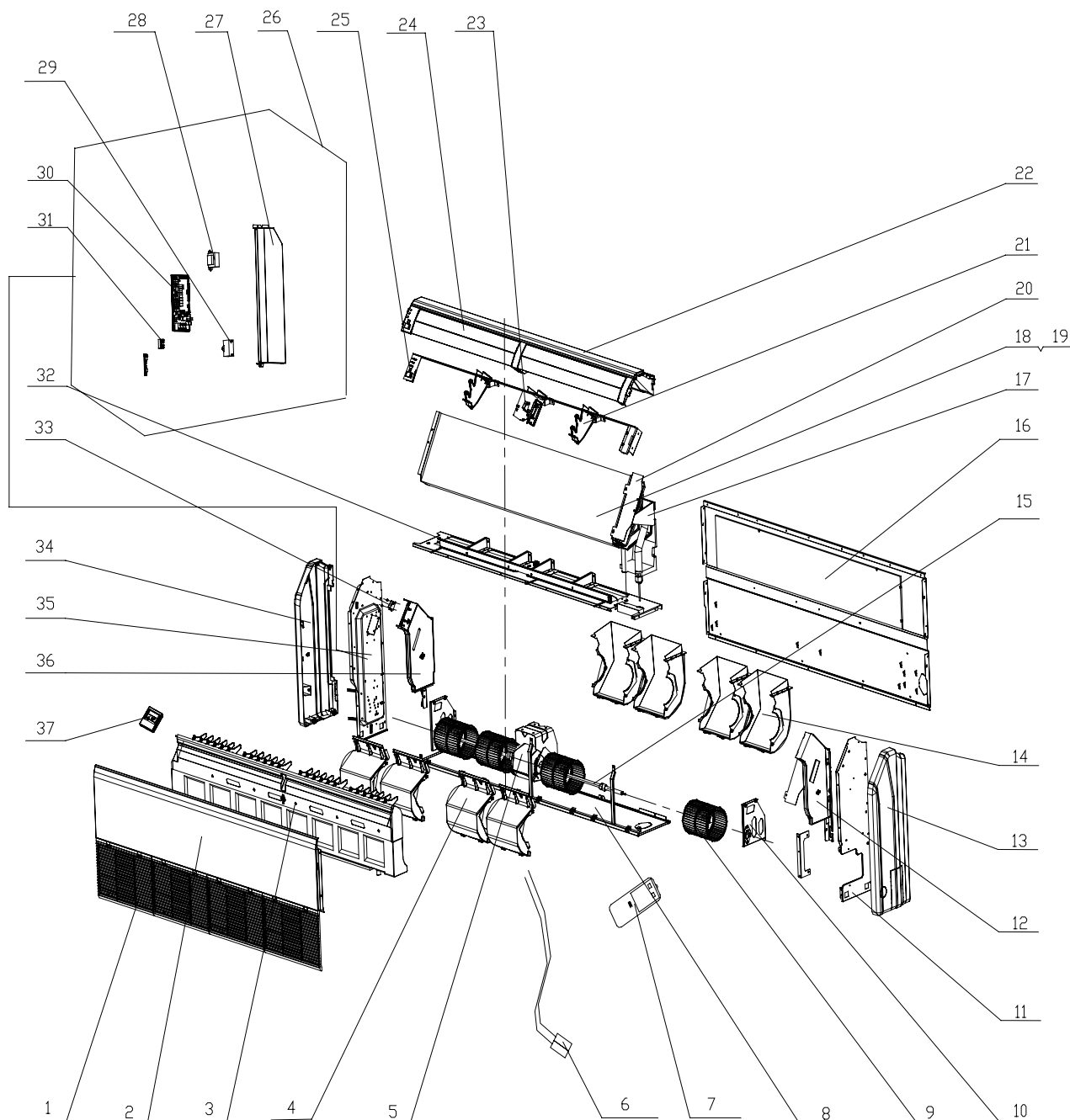
● Exploded View of :GMV-R71Zd/NaB-D,GMV-R90Zd/NaB-D.



● Parts List of GMV-R71Zd/NaB-D for CM600N0260 , GMV-R90Zd/NaB-D for CM600N0270 .

No.	Name	GMV-R71Zd/NaB-D	GMV-R90Zd/NaB-D	Qty
		Code	Code	
1	Front Gill	26909434	26909434	1
2	Top Cover Plate Sub-assy	01269405	01269405	1
3	Water tray assy	01289405	01289405	1
4	Front volute casing	26905208	26905208	3
5	Fan Motor	15709408	15709407	1
6	Rear Connection Board	01349410	01349410	1
7	Centrifugal fan	1041410101	1041410101	3
8	Right Foam Sub-assy	12509412	12509412	1
9	Install plank	01809402	01809401	1
10	Connection Board	02229406	02229406	1
11	Right Side Plate Sub-assy	01319408	01319408	1
12	Right Cover Plate	26909422	26909422	1
13	Rotary Axis Sub-Assy	73018052	73018052	1
14	Rear volute casing	26909419	26909419	3
15	Install Board Sub-assy	01329406	01329406	1
16	Rear Side Plate Assy	0131941901	0131941901	1
17	Mid-clapboard assy	01249407	0124940501	1
18	Water Lead Plate Sub-Assy	02224151P	02224151P	1
19	Connected Board	01344108	01344108	1
20	Electric expand valve fitting	4304000103	4304413202	1
21	Evaporator Assy	0102428401	01024284	1
22	Electronic Expansion Valve	07334283	07334389	1
23	Plank	26909409	26909409	3
24	Front Connection Board	01349408P	01349408P	1
25	Display Board Sub-Assy	0222940501	0222940501	1
26	Remote Controller	30510041	30510041	1
27	Sensor sub-assy	39008057G	39008057G	1
28	Guide Louver	26909432	26909432	2
29	Display Board	30296309	30294220	1
30	Stepping Motor	1521240206	1521240206	1
31	Left Foam Sub-assy	12509409	12509409	1
32	Left Side Plate Assy	01319406	01319406	1
33	Install plank	01809401	01809401	1
34	Left Cover Plate	26909416	26909416	1
35	Transformer	4311023701	4311023701	1
36	Electric Box cover	01429410P	01429410P	1
37	Main Board	30226910	30226910	1
38	Terminal Board	42011106	42011106	1
39	Electric Box Assy	01395131	01395076	1
40	Capacitor	33010011	33010014	1

● Exploded View of :GMV-R112Zd/NaB-D,GMV-R140Zd/NaB-D.

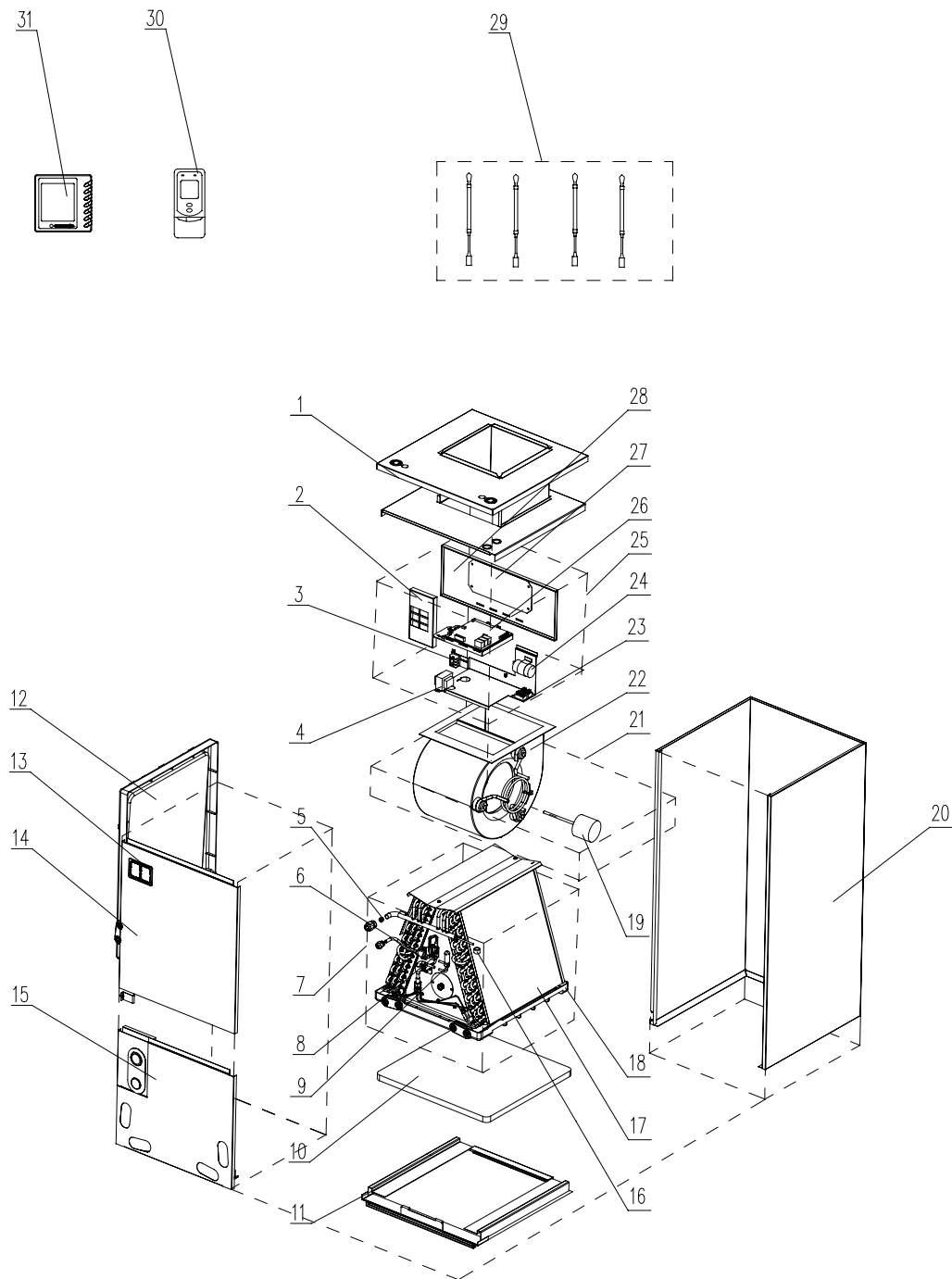


● Parts List of GMV-R112Zd/NaB-D for CM600N0280 , GMV-R140Zd/NaB-D for CM600N0300 .

No.	Name	GMV-R112Zd/NaB-D	GMV-R140Zd/NaB-D	Qty
		Code	Code	
1	Front Gill	26909425	26909425	1
2	Top Cover Plate Sub-assy	01269403	01269403	1
3	Water tray assy	01289401	01289401	1
4	Front volute casing	26905208	26905208	4
5	Fan Motor	15709405	15709405	1
6	Sensor sub-assy	39008057G	39008057G	1
7	Remote Controller	30510041	30510041	1
8	Rear Connection Board	01349411	01349411	1
9	Centrifugal fan	1041410101	1041410101	4
10	Plank	01809403	01809403	1
11	Right Side Plate Sub-assy	01319408	01319408	1
12	Right Foam Sub-assy	12509412	12509412	1
13	Right Cover Plate	26909422	26909422	1
14	Rear volute casing	26909419	26909419	4
15	Rotate Axis	26909413	26909413	1
16	Rear Side Plate Assy	01319422	01319422	1
17	Water Lead Plate Sub-Assy	02224151	02224151	1
18	Evaporator Assy	01024255	01024270	1
19	Electronic Expansion Valve	07334389	07334389	1
20	Connected Board	01344108	01344108	1
21	Plank	26909410	26909410	1
22	Front Connection Board	01349404P	01349404P	1
23	Stepping Motor	1521240201	1521240201	1
24	Guide Louver	26909408	26909408	4
25	Display Board	30294220	30294220	1
26	Electric Box Assy	01395076	01395076	1
27	Electric Box cover	01429410P	01429410P	1
28	Transformer	4311023701	4311023701	1
29	Capacitor	33010014	33010014	1
30	Main Board	30226910	30226910	1
31	Terminal	42011106	42011106	1
32	Middle bar Plate Assy	0124940101	0124940101	1
33	Stepping Motor	1521240206	1521240206	1
34	Left Cover Plate	26909416	26909416	1
35	Left Side Plate Assy	01319406	01319406	1
36	Left Foam Sub-assy	12509409	12509409	1
37	Display Board	30296309	30296309	1

5.5 Air Handler Type

- Exploded View of GMV-R71A/Na-D,GMV-R100A/Na-D,GMV-R140A/Na-D



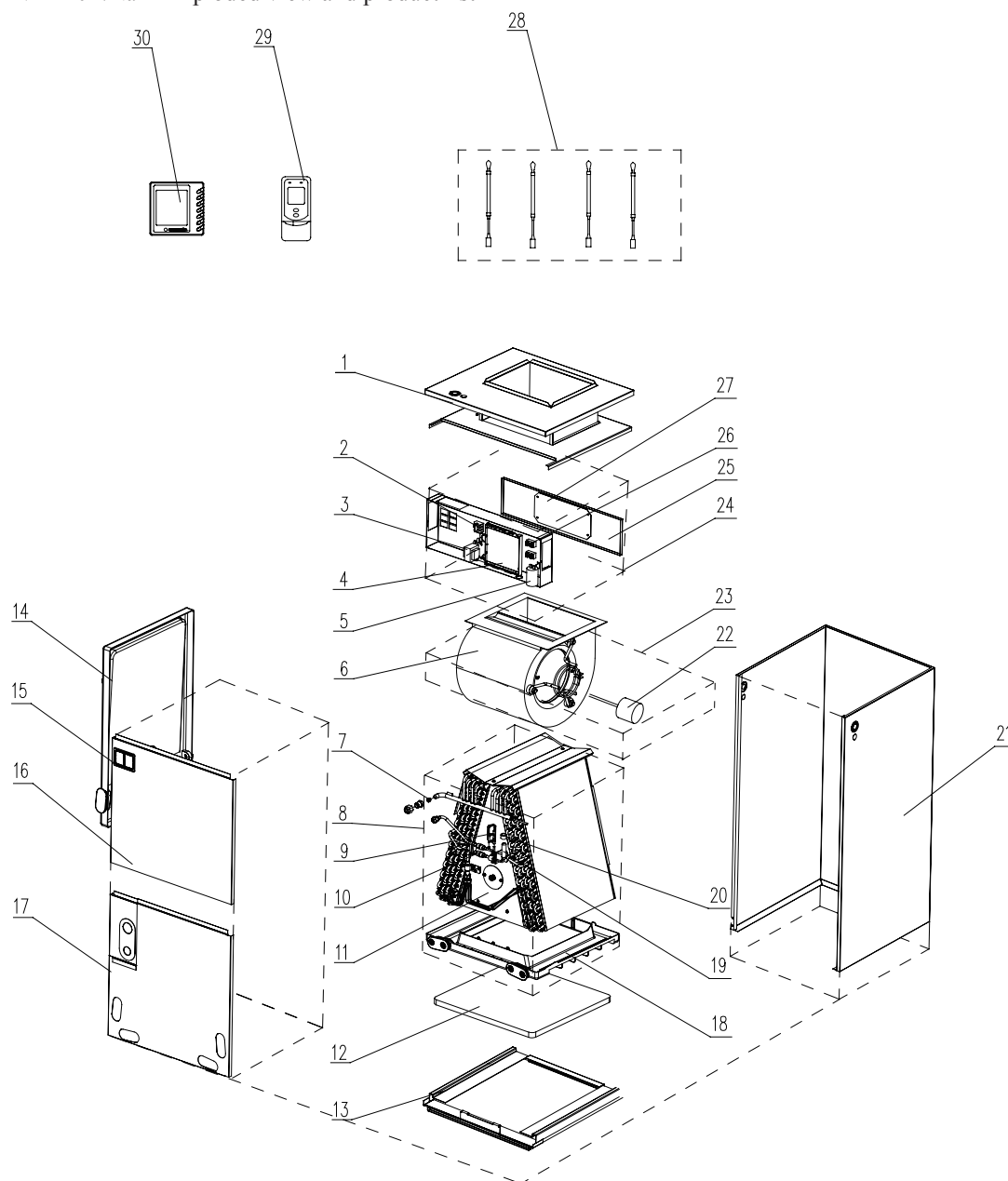
● Parts List of GMV-R71A/Na-D for CM700N0010, GMV-R100A/Na-D for CM700N0020,GMV-R140A/Na-D for CM700N0030.

Model	GMV-R71A/Na-D		
NO.	Part name	Part code	Quantity
1	Top Cover	0126221401P	1
2	Switch mounting plate	01322249	1
3	Terminal Board	4201019601	1
4	Transformer	43110237	1
5	Filter Sub-Assy	07210028	1
6	Filter 2	07216221	1
7	Water Tray	26902204	1
8	One way Valve	07334200	1
9	Electronic Expansion Valve	07334388	1
10	Filter Sub-Assy	11128707	1
11	Base Support plate	01892208P	1
12	Subsidiary water tray	26902205	1
13	InSulating plate	75142201	1
14	Top Cover Board Sub-assy	01262215	1
15	Lower Cover Plate Sub-Assy 1	01262270	1
16	Electric Expand Valve Fitting	4304413205	1
17	Evaporator Assy	01024312	1
18	Water Tray	26902204	1
19	Fan Motor	15702209	1
20	Cabinet Sub-assy	01512214	1
21	Motor Sub-Assy	15402202	1
22	Motor for Centrifugal Fan	15702201	1
23	Terminal Board	42011103	2
24	Capacitor	33000070	1
25	Electric Box Assy	02404139	1
26	Main Board	30226222	1
27	Baffle Plate 2	01352202	1
28	Mid Clapboard Sub-assy	01242231	1
29	Sensor Sub-assy	39008088G	1
30	Remote Controller	305125063	1
31	Display Board	30296014	1



Model	GMV-R100A/Na-D		
NO.	Part name	Part code	Quantity
1	Top Cover	01262214P	1
2	Switch mounting plate	01322249	1
3	Terminal Board	4201019601	1
4	Transformer	43110237	1
5	Filter Sub-Assy	07210028	1
6	Filter 2	07216221	1
7	Water Tray	01284309	1
8	One way Valve	07334200	1
9	Electronic Expansion Valve	07334389	1
10	Filter Sub-Assy	11128707	1
11	Base Support plate	01892208	1
12	Subsidiary water tray	26902205	1
13	InSulating plate	75142201	1
14	Top Cover Board Sub-assy	01262215	1
15	Lower Cover Plate Sub-Assy 1	01262268	1
16	Electric Expand Valve Fitting	4304413205	1
17	Evaporator Assy	01024311	1
18	Water Tray	26902204	1
19	Fan Motor	15702208	1
20	Cabinet Sub-assy	01512210	1
21	Motor Sub-Assy	15402201	1
22	Motor for Centrifugal Fan	15702202	1
23	Terminal Board	42011103	2
24	Capacitor	33000074	1
25	Electric Box Assy	02404140	1
26	Main Board	30226222	1
27	Baffle Plate 2	01352202	1
28	Mid Clapboard Sub-assy	01242232	1
29	Sensor Sub-assy	39008088G	1
30	Remote Controller	305125063	1
31	Display Board	30296014	1

● GMV-R140A/Na-D Exploded view and product list



Model	GMV-R140A/Na-D		
NO.	Part name	Part code	Quantity
1	Top Cover	01262219P	1
2	Terminal Board	4201019601	1
3	Transformer	43110237	1
4	Main Board	30226222	1
5	Capacitor CBB65	33000075	1
6	Motor for Centrifugal Fan	15702203	1
7	Filter Sub-Assy	'07210028	1
8	Water Tray Assy	01284177	1
9	One way Valve	07334200	1
10	Filter 2	07216221	2
11	Evaporator Assy	01024310	1
12	Filter Sub-Assy	11122201	1
13	Base Support plate	'01892209P	1
14	Secondary Water Tray	26902207	1
15	Insulating plate	75142201	1
16	Lower Cover Plate Sub-Assy	01262220	1
17	Lower Cover Plate Sub-Assy 1	01262264	1
18	Main water Tray	26902206	1
19	Electronic Expansion Valve	07334389	1
20	Electric Expand Valve Fitting	4304413205	1
21	Cabinet Sub-assy	01512212	1
22	Fan Motor	15702207	1
23	Motor Sub-Assy	15402203	1
24	Electric Box Assy	01395199	1
25	Mid-clapboard sub-assy	01242206	1
26	Terminal Board	42011103	2
27	Baffle Plate 2	01352202	1
28	Sensor Sub-assy	39008088G	1
29	Remote Controller	305125063	1
30	Display Board	30296014	1



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For continuous improvement in the products, Gree reserves the right to modify the product specification and appearance in this manual without notice and without incurring any obligations.

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